CUSTOMER COMPLIMENTS AS MORE THAN COMPLEMENTARY FEEDBACK

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ABSTRACT

Customer compliments as under-researched forms of customer feedback are examined and ten propositions developed. Some preliminary findings from a pilot study are also presented in support of an extended set of motivations to explain complimenting behavior, that is, Complimenting behavior = f(delight, expected benefits, involvement, social norms, and personal and situational factors). Managerial and marketing implications are discussed throughout the paper, including a recommended four step process firms may use to capitalize on the potential that customer compliments offer: Step 1: Encourage compliments. Step 2: Recognize and capture compliments. Step 3: Understand compliments. Step 4: Act on compliments.

INTRODUCTION

One need not look beyond the title of this journal to realize that complaining behavior has played a central role in the study of consumer (dis)satisfaction for more than a quarter of a century. Indeed, it is difficult to discuss (dis)satisfaction or complaining behavior without mention of the other. In contrast, issues pertaining to consumer or customer compliments have received far less attention in the literature. However, customer compliments represent a potent form of feedback to businesses, and their potential for helping to shape both organizational and individual behaviors may be greater than that of customer complaints. The lack of attention in the literature to customer compliments seems quite unjustified.

To help give some momentum to the study of the role of compliments in shaping company policies, we will review some of the things we know about compliments and suggest some possible extensions to compliment research. We believe that expanding the study of consumer satisfaction, dissatisfaction and complaining behavior to include compliments is important and propose that at least four steps are necessary to capitalize on the potential that customer compliments hold. Not only can marketing practitioners use the four step process to orchestrate their efforts, but consumer researchers can use the framework in their investigation of a broad range of compliment-relevant issues. These four steps include:

Step 1: Encourage Compliments
Step 2: Recognize Compliments
Step 3: Understand Compliments
Step 4: Act on Compliments

We will explain why we identify each of these steps, advance several propositions supporting the importance of each, and present some preliminary findings from a small-scale pilot study. We begin by examining a few issues that complaining behavior and complimenting behavior have in common, then progress toward issues more specific to compliments.

STEP 1: ENCOURAGING CUSTOMER FEEDBACK

When Silence Is Not Golden

Business practitioners often seem to believe and act as though dissatisfaction is directly associated with complaining behavior, i.e., consumers complain because they are dissatisfied and consumers who don't complain must be satisfied. Consumer researchers know better, and a quick review of the literature demonstrates that only a very small proportion of dissatisfied consumers actually complain directly to businesses. (See for example Andreasen & Best 1977; TARP 1986)

Without customer feedback, unrecognized problems cannot be fixed and opportunities to develop and extend customer relationships are lost. But the fact that firms which are aware of complaints often do not systematically heed the message sent to them by the complainers is also very damaging. Oliver (1997) notes that as many as half of all customer complaining episodes actually end with even more dissatisfaction ("secondary dissatisfaction") produced by the business's responses to the complaint itself. Smart and Martin (1992) found that a lack of business response, particularly response addressing the issues raised by complaints, was a very major source of dissatisfaction. Dissatisfaction with business responses, of course, leads to decreased future patronage of the firms allowing the secondary (dis)satisfaction to occur (Gilly and Gelb 1982). Many unfortunate outcomes from bad word-of-mouth to sales decreases might be avoided when businesses encourage complaints and respond appropriately to them (Oliver 1997). Consumer communications, whether in the form of complaints or compliments, must be heard and given attention. Even subtle compliments should be an integral part of the process of measuring the extent and the focal point of (dis)satisfaction -- even when these entail little more than consumers bestowing some sort of positive, above average rating on a company's customer comment card.

The case of a campground owner in Idaho exemplifies the unfortunate results of the ignorance of complaining behavior. The individual bragged to one of the authors that he had received only four complaints in his thirteen years in business. Despite Kotler's (1980) assertion that the concern of marketing managers should be to *increase* the number of consumer complaints to really find out how well their companies are serving customers, the campground owner apparently subscribed to the conventional and convenient point of view: "the fewer complaints, the better." In other words, the campground owner assumed that silent customers were satisfied, when any one of a multitude of reasons may have prevented the owner from hearing complaints. For example, unhappy campers may not have known who to complain to, or perhaps they did voice complaints but front-line personnel never passed them along to the owner. Unhappy campers may have believed that management could not or would not act on their concerns, that it was too inconvenient to lodge a complaint, or that they would not benefit by doing so if they did not expect to camp at that campground again. Therefore, we are reminded of the following proposition that is well recognized in the literature:

> *P1: Consumer silence is not necessarily indicative of satisfaction. A business can not know if its customers are satisfied unless they inform the business accordingly.*

A noteworthy article by Lewis (1983) commented on the relative infrequency of post-purchase consumer communications, concluding that people who complain will also compliment when warranted, but the majority of people will do neither one unless they feel strongly enough. Oliver's (1997) review of the literature confirms the overall low incidence of both complaining and complimenting behavior. So we are led to the second proposition:

> *P2: Just as complaints don't always accompany dissatisfaction, compliments don't always accompany satisfaction.*

Encouraging Complaints and Compliments

Consumer communications which highlight high involvement instances of satisfaction, dissatisfaction and information seeking directly affect the quality of relationships with individual customers and the prospects for future patronage behavior. (see TARP 1979 and Martin and Smart 1994). Stephens and Gwinner (1998) examined how many potentially helpful complaints are never received because consumers fail to voice them, preferring instead to quietly discontinue patronage. This phenomenon, which they referred to as "silent defection," is a disaster for business and management must understand that such behavior may occur for a number of correctable reasons. Contributing to the choice not to complain are consumers' perceptions of the psychological costs of complaining, the consumers' low "coping potential" which results from a lack of experience, fear of interpersonal discomfort, conflict and a low appraisal of the chances of positive outcomes of the situation. They concluded that firms must take actions to make complaining less costly and even *reward* consumers if the firm wishes to benefit from the information communicated through complaints.

Zeithaml and Bitner's services marketing text (1996) reviewed the need for continual consumer research to monitor company performance as a means of preventing the above mentioned silent customer loss. Consumer complaint solicitation and post-transaction surveys are at the top of their list of methods for this. Many firms, of course, initiate communication with consumers by intermittently conducting formal surveys, interviewing key customers, promoting their 800 telephone numbers and providing customer comment cards at the point of sale.

In contrast with typical one-shot market research campaigns, voluntary communications by consumers may arrive in a relatively heavy, continuous flow. Of course it is important that the firms have developed systematic procedures for recording reports from all of their relevant customer contacts.

Managing the Feedback Flow

In addition to encouraging customers to speak up, managing the channel of "feedback" has long been recognized as vital, especially in service industries where word-of-mouth communication is pervasive and plays a key role in helping prospective customers better understand what service they should expect before experiencing the service firsthand (Berry 1980). In this regard, marketing practitioners face a double challenge: First, to have customers channel any *negative* feedback directly to the company and not to other consumers, while second, simultaneously encouraging the customers to spread *positive* comments about the company.

More recently, Internet technology and increasingly widespread access have accelerated the spread of the word-of-mouth phenomena, causing it to evolve into a "viral marketing" phenomena that businesses can not afford to ignore (Krishnamurthy 2001). With their e-mail lists and access to "chat rooms," for example, consumers can quickly and easily communicate with potentially thousands of other consumers. So, while it always has been advantageous for marketers to encourage the spread of positive word-of-mouth, the "virtual" evolution of the phenomena implies that the stakes for doing so have multiplied and that new technologies create new opportunities for doing so. It seems that word-of-mouth communications are now on steroids, necessitating the following reminder:

> *P3: Compliments, like complaints, may be heard by many.*

THE IMPORTANCE OF COMPLIMENTS

A scan of the literature still leaves the impression that many firms treat complaints as fires to be put out but that compliments create no such sense of urgency. While compliments may be nice, do they have as much impact as complaints on business behavior? The possibility is there, but since there is surprisingly little research on consumer compliments, it is not clear from the marketing literature that this is true. However, despite the relative void in the consumer behavior and (dis)satisfaction literature, more evidence for the impact of praise and compliments on businesses can be found in the more general behavior modification literature or in the management literature pertaining to leadership, supervision, coaching, and training, specifically (e.g., see Cook, Hunsaker and Coffey 1997; Hrebiniak and Joyce 1984; Luthans 1985).

Customers as Trainers

In her book *Serving Them Right*, Laura

Liswood asserts that it's not the customer's job to train customer-contact employees (Liswood 1990). Her point is well taken in that service quality tends to suffer when workers do not possess the skills or knowledge to perform. It's probably safe to say that most consumers have felt frustrated or otherwise dissatisfied when "served" by poorly trained, apathetic and incompetent front-line workers and the consumer is forced to explain how the service should be provided. Understandably, customers don't want to break in new workers, but unfortunately such encounters seem to be an all too common fact of service life.

In response, customers may exhibit any one or a combination of behaviors. For example, they may suffer through such encounters with the resolve not to patronize the business again or avoid the offending worker in the future. They may complain to management with the expectation (or hope) that management will retrain or reprimand the worker or otherwise "take care of it." However, management may not take care of it, so disgruntled customers may not relay their experiences to management.

One reason managers may not take care of it has to do with the increasingly popular notion of employee empowerment, a practice that charges employees with the responsibility of "taking care of it" -- with management's blessings and often without management's knowledge. Proponents of the empowerment movement believe that the unique vantage point of the front line gives workers the needed perspective to make decisions that affect customer satisfaction. By making decisions on-the-spot, without deferring to a supervisor, workers can free supervisors' time for other things and decisions can be made swiftly (Bowen and Lawler 1992, 1995; Zemke and Schaaf 1989). The quicker customer complaints are resolved, the more likely customers are to be satisfied (Bitner 1990).

So, the practice of empowering service employees to take the initiative themselves to address customers' concerns or unique service requirements results in more of a hands off supervisory style, leaving employees to fend for themselves. It follows that when a customer-contact employee's actions are not restricted by a micro manager or a detailed policy manual, s/he may look elsewhere for guidance. S/he may dip into her/his personal pool of experience, ask for advice from coworkers, or turn to the customer directly at hand. This latter possibility casts customers into potentially influential roles as coaches or trainers to educate front line workers, assertively suggest appropriate remedies to alleviate dissatisfaction, and otherwise shape behavior. Thus, even if we agree with Liswood's thesis that customers should not have to train employees, the numerous opportunities to do so seem apparent. In other words, a natural outgrowth of the practice of empowering employees is that of empowering customers too. Simply put:

*P4: It may not be the customer's **job** to train front-line employees, but it is his/her **opportunity**.*

The Power of Praise

Almost by definition, empowered consumers may draw from multiple influencing tactics to shape the behaviors of the customer-contact employees they "train." Common among the influencing attempts are elements of punishment (complaints) or reward (compliments). Compliments are an excellent indication that the service providers' actions have led to customers' satisfaction. These types of actions need to be encouraged so they will be repeated. Thus a most obvious use of compliments is to "Catch somebody doing something right" and reinforce the behavior. Public rewards, when very visible (such as an employee of the month designated parking place) can also promote vicarious learning by other employees who may strive for these performance standards. But not only should front line customer contact people be recognized, but also middle level managers who are the trainers and supervisors of these employees also should share in the appreciation (Hymowitz 1999).

The case for consumer compliments is fortified when we recognize that praise is likely to be more effective than criticism. Consider that everyone engages in selective perception and finds that pleasant news is more easily heard than the unpleasant. In fact, it seems unlikely that recipients of flattering comments would conjure up counter-arguments. Agreeing with praise, but defensively posturing against complaints is human nature and perhaps corporate nature too.

This phenomenon was demonstrated in a 1988 study by Martin and Smart in which they posed legitimately as satisfied or dissatisfied customers and simultaneously wrote letters of praise and complaint to manufacturers of consumer packaged goods. In many cases companies attributed the cause of complaints to other parties or to uncontrollable circumstances, but the same companies readily accepted credit for complimentary remarks about the *same* issues. For example, when one member of the research team complained that too many cookies were broken, the manufacturer implied that the shipper or retailer was at fault. In response to a more flattering letter about the company's quality -- including few broken cookies -- the company touted its package design, its attention to detail and its workers' caring attitudes.

There also appears to be a greater opportunity for complimentary communications to influence businesses. The few available studies indicate that compliments may occur more frequently than complaints (Robinson and Berl 1980; Cadotte and Turgeon 1988; Martin and Smart 1988; Oliver 1997).

Martin and Smart (1988) reviewed the rise of the correspondence-handling function in Consumer Affairs departments as more and more firms recognized the importance of dealing quickly and accurately with consumer complaints and compliments as a means of customer retention. In this and a series of following articles they highlighted the opportunity for firms to cultivate consumer relationships following the receipt of complaints as well as a similar opportunity for productive communication with consumers following their compliments. Their examination of business responses to both compliments and complaints indicated that businesses are increasingly more sensitive to the need to answer both types of communication than they have been in past years, though responses to compliments tended to be less well designed.

In summary then, it appears that:

> *P5: Consumer compliments are more likely to influence business behavior (including behavior of individual employees) than are consumer complaints.*

STEP 2: RECOGNIZING COMPLIMENTS

In order to capture compliments for analysis and decision making, one must recognize them when they raise their heads. But as the following sections suggest, this task is easier said than done.

Compliments: Bring Your Own Definition

Sorry, we don't have a definition for "compliment." Much like popular business terms such as quality, service, involvement, and productivity, everyone knows what a compliment is, sort of, but the concept is elusive. It can mean different things to different people.

Consider these issues: Are compliments restricted to a consumer's verbal recognition of product/service superiority or affect ("This is a great product. I really love it"), or should expressions of appreciation be considered as compliments (Charles: "Fred, thank you so much for pointing out this possibility")? Can nonverbal behaviors that convey courtesy, respect or consideration also be construed as compliments (e.g., smiling, establishing eye contact, shaking hands, holding the door, patiently waiting)? What about subtle, casual remarks that signal recognition, respect or courtesy (e.g., remembering and using another person's name), or questions that may have a similar effect (e.g., "Is that made of genuine silk? May I touch it?")?

To what extent should the situational context of a comment or behavior be considered in one's definition? For example, when Coca Cola changed its formula in 1985 and began receiving thousands of letters and telephone calls from loyal

Coke drinkers protesting the change, were consumers simply complaining about the change or were they -- in effect -- complimenting Coca Cola on its original formula and how well the company and brand had established an emotional bond with generations of customers? Was the feedback a testament to consumer satisfaction or dissatisfaction?

The answers to these questions are open to discussion, but ultimately compliments are what object-recipients think they are. They are subjectively perceived, and the recipients' interpretation may or may not correspond to what people bestowing the "compliments" intended.

P6: Compliments are largely a matter of perception.

A related issue is the relative potency of various types of compliments. Some compliments may be perceived as insincere or routinized to the point that they have no apparent impact or are not even considered a compliment by the receiver. Erving Goffman (1967) wrote that ritualistic elements of complimenting behavior occur in the maintenance of daily personal relationships. People understand that compliments are part of the "grease" that smooths transactions and thus should be discounted in terms of their objective meanings. In extreme cases, unwarranted praise becomes flattery delivered to "...obligate a target person who is committed to the distributive justice rule...to find ways to benefit the ingratiator" (Jones 1964). Of course some praise is expected, highly regarded, considered extraordinary and highly rewarding to the recipient.

P7: The potency of compliments is also subjectively perceived.

Identifying Compliments

All compliments may not be neatly typed letters of praise, and businesses should not expect compliments to be clearly labeled and fall in their laps. And, they should neither be expected to occur immediately at the time of a sale nor can they be expected to be made to the service person responsible for the performance.

The following characterizes the difficulty of actually identifying compliments: In the mid-1990s one of the authors wrote a book length manuscript applying the team concept to the sport of bowling. Prior to publication, he sent preliminary drafts to several industry experts for comments. One recipient of the draft was an innovative proprietor of a chain of bowling centers on the west coast. He reviewed the manuscript carefully and left no doubt that he was an independent thinker -- offering several frank criticisms and suggestions without hesitation.

One of the earlier chapters in the book (one receiving virtually no comments by the frank reviewer) talked about the difference between a group and a team, with a team being something "more" than a group -- i.e., a team is more cohesive, is more likely to be focused on superordinate goals, and so on. About a year later, the author learned from another source that the harsh reviewer had changed the name of his company from "The Bowling Management Group" to "The Bowling Management Team."

About three years later the same critic invited the author to a planning retreat for the purpose of developing a long-range, ten year plan for his chain of bowling centers. The author considered the invitation itself to be a compliment, doubly so considering the proprietor's age, 82! Thus:

P8: Compliments can be very subtle and may go unrecognized.

Complex Objects of Compliments

Companies may receive consumer compliments on one or a combination of levels and this may make recognition of compliments even more difficult. The *company entity* itself is one level. For example, the faceless retailer may be complimented for extending its store hours, having a sale, tastefully redecorating the physical environment, or introducing a creative advertisement. An individual manager, department or another organization altogether (e.g., ad agency) may be responsible for the action, but not knowing this, the consumer is likely to compliment the company or its figurehead. Routing these sorts of compliments to the individuals within the organization most responsible for the practices giving rise to the compliments would seem to be an obvious morale booster.

Inseparably intertwined with the company are its *products or brands,* which may be the most important category for marketers of tangible goods, since the products/brands are the focal points of the exchange relationships. In any business in which contact between customers and personnel is common, when the contact is frequently nonroutine in nature (e.g., encounters/products customized), or when the product is largely intangible (i.e., front-line workers are viewed *as* the products), *personnel* may be the object of the compliment. Finally, in many service businesses and retail store settings in which consumers congregate and share the physical environment, *other customers* might be the object of compliments. Still, in other instances, the *customer himself* might be the object of his own self-directed compliment, e.g., when the consumer pats himself on the back for being an astute shopper and finding such a great product, wonderful company, or terrific bargain. Therefore:

> *P9: The object(s) of consumer compliments can vary widely.*

STEP 3: UNDERSTANDING COMPLIMENTS

Oliver (1997), as have others, noted the importance of firms encouraging consumers to complain so that the firm could not only prevent negative consumer reactions and the related implications for the loss of business, but also could take advantage of opportunities to create "secondary satisfaction" (with the complaint handling process) for the consumer. In addition, the firm could establish valuable communication with consumers at a time when they were primed to receive a response from the firm to which they complained. Oliver also sees compliments as desirable indications that consumers are delighted (maybe extra-satisfied) with the firm's performance. While he suggests that compliments should be reinforced, he does not explore the additional implications of responding to consumer compliments. As mentioned above, consumers might sometimes have ulterior motives such as flattery for making compliments. As a result, the same type of responses to differently motivated compliments may not be appropriate. We propose that appropriate responses to compliments would require understanding of their motivation, an issue which may be more complicated than the understanding of consumer complaints.

> *P10: Compliments may be motivated for several reasons.*

Motivations for Complimenting Behavior

Consumer complaining behavior is known to be influenced by a number of variables in addition to consumer dissatisfaction (Landon 1977). Landon's classic model of consumer complaining behavior, which has been extended in more comprehensive forms by writers such as Blodgett and Granbois (1992), proposed that complaining is a function of not only dissatisfaction, but also of the importance of the purchase, the expected benefits of complaining, and the personal characteristics of the consumer. More recently, Kowalski (1996) offered a model of complaining which while consistent with Landon and others, provided an explanation for complaining in the absence of dissatisfaction. We believe that the motivations for complimenting behavior are as complex as complaining behavior, if not more so.

Certainly, in a way analogous to complaining, similar compliments could result from a wide variety of causes. Also, compliments sometimes may occur in the absence of consumer satisfaction. Following a thorough literature review and inter-researcher and classroom "brain-storming" sessions we decided on a complimenting model which is analogous to Landon's complaining model as it might be modified by the work of Kowalski:

Complimenting Behavior = f(delight, expected benefits, involvement, social norms, and personal and situational factors)

This model allows for the phenomenon that complimenting behavior may be stimulated by consumer delight, but may occur even in cases of dissatisfaction. This much seems obvious: there is no one-to-one correspondence of complimenting behavior and motivations. Certainly we describe situations in which dissatisfied customers offer compliments. For example, if customers believe the business is trying hard and they wish to be encouraging rather than discouraging, or if they wish to avoid a confrontational or embarrassing situation. On the other hand, some largely satisfied customers may complain if they think they will profit. Ninety-nine percent of the product/service attributes may be considered "perfect," but the remaining one percent is noticeable enough to catch customers' attention and prompt reporting, but not problematic enough to threaten overall satisfaction . Furthermore, it seems likely that some customers may compliment *and* complain almost simultaneously, e.g., when contrasting one experience (expectations met) with another (expectations not met), when using a compliment as a weapon of civility to soften the blow of a complaint to follow ("You're very good, *but...*"), or when (dis)satisfaction hinges on multiple attributes or attitude objects ("Your employees are great, but your merchandise stinks").

Sometimes consumers express their gratitude in the form of compliments when they view personnel or businesses as deserving of such recognition, or because "it's the courteous thing to do." Or, compliments may be viewed simply as expressions of self-identity or as manifestations of one's involvement with the product/service or company. Consumer compliments may be used as interpersonal communication devices to establish rapport with customer-contact employees or even with other customers in product owners groups. They may serve as investments in business relationships, with the expectation of reciprocal behavior, preferential treatment or some other sort of reward. Knowingly or unknowingly they may be used as a part of consumers' dissonance reduction efforts (i.e., circulating flattering comments about the product, personnel, company or the deal reinforces the wisdom of the purchase), or efforts to reduce possible company dissonance (i.e., to reinforce the company's commitment to the brand). When sentiments are mixed, compliments may be used as complaint buffers, i.e., to minimize the likelihood of a negative or defensive reaction to complaints, thereby increasing the likelihood that complaints will be addressed satisfactorily.

The variety of motivations that give rise to compliments magnifies the difficulty of truly understanding the complimenting consumer. The eventual conclusion may be that if you've seen *one* complimenting consumer, you've seen *one* complimenting consumer, not all of them! Nonetheless, a number of research questions sparked our interest: What are the primary motivations or underlying reasons giving rise to complimenting behavior? Are some consumers inclined to be more complimentary more frequently than are other consumers, and if so, are their motivations more altruistic than infrequent complimenters? Are their motivations consistent or do they vary across situations and consumer characteristics? Is complimenting behavior a form of coping, a natural consequence of one's ability to empathize with others, or a more general strand in our complex fabric of communication and interpersonal skills? Is complimenting a personality trait indicative of optimism, extroversion, character, or something else? Is it more often a gender thing, an age thing, a cultural thing, an education thing, or just an everyday garden variety thing equally likely to be found in anyone's back yard?

Of course, it would take a small army of consumer researchers years to answer these questions definitively, but we did launch a small pilot study to begin the investigation and garner a few insights. Students in two sections of an undergraduate consumer behavior course were asked to complete an assignment for course credit.

An Exploratory Study

The authors conducted a small pilot study to examine the possibility of a wide number of motives for complimenting behavior and found some supporting evidence. As an outcome of the "brain-storming" sessions we hypothesized a set of motivations which we represented with a set of 22 Likert type statements of reasons for making compliments. Students administered these to a small sample of 31 consumers who had recently reported an instance of complimenting a business and who were asked to describe the complimenting situation. The Likert statements were as follows:

The company deserved the praise
I was delighted with the product or service
To encourage the company to continue the good work
To be courteous
To be a role model for other people
To be a pleasant person
To get rewarded with a gift
To be recognized by the company
To make myself feel better about the purchase
To feel better about my own shopping ability
To create a better relationship with the company
To make the company more responsive to people like me
To help other consumers by encouraging the company
Because I identify with the company
Because the company's success is important to me
Because the product or service is very important to me
Because the company tried so hard to serve me
Because I'm a very positive person
Because I identify with a brand the company makes
To soften a criticism I made in the same communication
I enjoy giving compliments to others
The company has a long record of good service to me

The resulting alpha coefficient for the set of items was .80, showing that the consumers responded to the items in a very consistent way, and suggesting that these statements captured the essence of an underlying construct, perhaps people's tendency to compliment when they believe it is appropriate. Although factor analysis was impossible because of the small sample size, an examination of the significant correlations of several of the items was quite interesting. For example:

1. "Delighted" was correlated only with "The company tried so hard to serve me." (r=.58)
2. "To get rewarded with a gift" was correlated (r=.80) with "To be recognized"; with "To make the company more responsive to me" (r=.53); with "Because the company's success is important to me" (r=.53); and with "I enjoy giving compliments" (r=.52)
3. "To feel better about the purchase" was correlated with "To create a better relationship with the company"(r=.78)
4. "To soften the criticism" was correlated with "To be a pleasant person"(r=.36); and with "To be a role model for other people"(r=.47)
5. "To encourage the company to continue the good work" was not significantly correlated with any of the other items.
6. The items "To make myself feel better about the purchase" and "To feel better about my shopping ability" were not correlated.

Although this analysis is only exploratory (with a larger sample of data now being collected) and based only on the inter-correlation of items from a small sample, it does seem to suggest that several dimensions might be needed to explain consumer complimenting. Delight appeared to be a separate dimension as did tangible rewards, product/service importance and possibly personal involvement level. In addition, a reciprocity/ social norm variable seemed to materialize since items such as "To be a pleasant person," "To soften the criticism," and "To be a role model" were correlated.

STEP 4: ACTING ON COMPLIMENTS

Implications of Alternative Motivations for Complimenting

At an exploratory level, and consistent with our extended version of Landon's model, we have found some evidence that several different motivations may influence consumer complimenting behavior. The question then is what does this mean for the marketer? First,

Table 1

Motivation	Implication	Approach
Delight or great satisfaction	The consumer is open to an expansion of the relationship and has some degree of positive emotion active.	Suggest additional uses or accompanying services or products
Dissonance Reduction	The consumer needs reassurance.	Emphasize your quality control and advantages over non-chosen alternatives the customer had considered
Reciprocity/ Social Norms	The customer is sensitive and feels obligated to be interpersonally proper.	Stress customer contact person training and high quality acknowledgment of the compliment.
Improve Relationship with a Service Person	Need to maintain low staff turnover with care to reward the employees who excel at customer relations.	Consider feasibility of assigning customer service reps, setting appointments, etc..
High Involvement with Product or Service	Word-of-mouth by customer is very likely	Consider any means of encouragement
Voting Behavior to continue special services or products	Might be true for niche products or services.	Consider needed segment size for loyal users.
To Buffer Complaints & Increase Effectiveness	Consumer feels the need to improve receptivity to an accompanying complaint	Make certain the costs of complaining are not too high and that customer contact people do not impose these on consumers with defensive responses
Flattery: To get a Tangible Reward	Actual flattery or ingratiation attempted to gain undeserved reward	Attempts to avoid any such "rip-off" behavior would be counter-productive...treat as a necessary cost of business

business responses to compliments may vary in effectiveness depending upon the reasons for which the compliments were made. Related to this is the need to personalize standard company responses to make them as effective at building profitable relationships as is possible. For example, if it were possible to classify the operative consumer complimenting motivations in each case, a firm might be able to consider the possible response scenarios suggested in Table 1. The "catch" from a managerial view, however, is that it is not *yet* possible to know exactly what motives or combination of motives actually produced the compliments.

SUMMARY AND CONCLUSIONS

Compared to consumer complaining behavior, consumer researchers (and probably marketing practitioners as well) have devoted very little attention to the notion of consumer or customer compliments. Yet, compliments are a legitimate form of feedback – potentially more effective than complaints, and quite likely a form that consumers would prefer to proffer. We propose that a simple four step process can be useful to both academic consumer researchers and marketing practitioners: Step 1: Encourage compliments. Step 2: Recognize compliments. Step 3: Understand compliments. Step 4: Act on compliments.

In this paper, we have used existing consumer research and theory, especially as it pertains to consumer (dis)satisfaction and complaining behavior, as a springboard, of sorts, to examine several relevant issues pertaining to consumer compliments, complimenting behavior, and motivations for compliments. We also found the more general behavior modification literature to be illuminating – especially in support of our proposition that compliments (as a form of rewards) may be more influential in shaping customer-contact personnel's behavior than complaints (punishments).

At times in our modest quest to understand compliments, we found complaint and compliment issues to be similar or closely related phenomena, much like two sides of the same coin. At the same time we realize that complaining and complimenting seem to stake out different terrain, perhaps with complaining more likely triggered by consumer dissatisfaction and the desire for compensation and complimenting more likely triggered by the need to follow social norms and achieve personal psychological adjustments. As we continue our research efforts, we hope to unravel and further elaborate on these curious relationships between complaints and compliments, but for now we would simply warn others to avoid unwarranted assumptions about compliments and making precarious inferential leaps from complaints to compliments. Complaints and compliments may live in the same forest and share some of the same food sources, but they are different animals in many respects.

Although we employed a few mixed metaphors in our discussion, we also articulated ten propositions we believe to be relevant to the understanding of consumer compliments and related motivations and behaviors:

P1: Consumer silence is not necessarily indicative of satisfaction. A business can not know if its customers are satisfied unless they inform the business accordingly.

P2: Just as complaints don't always accompany dissatisfaction, compliments don't always accompany satisfaction.

P3: Compliments, like complaints, may be heard by many.

P4: It may not be the customer's *job* to train front-line employees, but it is her/her *opportunity*.

P5: Consumer compliments are more likely to influence business behavior (including behavior of individual employees) than are consumer complaints.

P6: Compliments are largely a matter of perception.

P7: The potency of compliments is also subjectively perceived.

P8: Compliments can be very subtle and may go without being recognized.

P9: The object(s) of consumer compliments can vary widely.

P10: Compliments may be motivated for several reasons.

Further, we elaborated on P10, offering preliminary findings from a pilot study in support of an extension of Landon's (1977) model, i.e.:

Complimenting Behavior = f(delight, expected benefits, involvement, social norms, and personal and situational factors)

Depending upon consumers' motivations for offering complimentary feedback, some company responses may be more appropriate than others. We briefly outlined some of these possibilities to show both the potential business implications of understanding consumer motivations for complimenting behavior as well as to motivate consumer researchers to further develop and explore this line of inquiry.

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EXPLORING ALTERNATIVE ANTECEDENTS OF CUSTOMER DELIGHT

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ABSTRACT

Satisfaction researchers in marketing are in general agreement that the emotion of delight is comprised of joy and surprise. This study reviews the relevant emotions literature in psychology, the neurosciences and philosophy to show that there may be two different kinds of delight - one with surprise and one without surprise. The work of Plutchik (1980) is often cited as the basis for conceptualizing delight as being comprised of joy and surprise. We replicated Plutchik's two studies using more positive complex emotion terms than the original study. It was found that subjects could feel delighted without being surprised and that there were different emotion terms that were considered by subjects to be comprised of joy and surprise. These results were validated in a second study in which consumer emotions and other responses were captured in a live setting during the intermission of an upbeat, fast tempo Irish Dance concert. The results show that consumers could be delighted even when they were not surprised. We show how these findings clarify and explain some unexpected results obtained in past research on customer delight. The implications of these findings for both theory and practice are also discussed.

INTRODUCTION

There is considerable interest among marketing scholars and practitioners in finding ways to increase customer loyalty. While satisfying customers was considered as an appropriate way to increase customer loyalty, recent research has offered evidence that in many industries satisfied customers were not loyal customers (Reichheld 1994). These studies found that customers who were completely satisfied were more likely to be loyal than customers who said they were satisfied. The customers who were completely satisfied with a firm have also been labeled as delighted customers. So, in recent years, delighting customers has been proposed as a way to increase customer loyalty towards a firm.

As interest in customer delight has grown, there appears to be a growing consensus among satisfaction researchers in marketing that the emotion of delight is comprised of joy and surprise (Oliver 1989; Westbrook and Oliver 1991; Kumar and Olshavsky 1997; Kumar and Iyer 2001). This conceptualization of delight as a combination of joy and surprise is seen in all the existing literature on customer delight. Although this conceptualization has not been controversial in the academic literature, practitioners have been less enthusiastic about the implications of this conceptualization. A common problem cited by many managers is that this conceptualization suggests that to delight their customers a firm has to pleasantly surprise their customers. Obviously, for firms that have frequent transactions or interactions with their customers, the cost of surprising customers at every transaction is impractical and prohibitive.

There are different ways in which one could respond to the concerns raised by these managers. One response would be to point out to the managers that surprising customers may involve raising the bar on a firm's performance and if the firm did not raise the bar themselves, the competition would raise the bar by improving their performance and take away the firm's customers. The managers typically counter this response by pointing out practical limitations with respect to how high the bar can be raised in a short period of time. Another response would be to point out to managers that firms ought to surprise their customers in an area where the firm has some sustainable competitive advantage. This would mean that the competition cannot easily emulate the firm's moves and so the firm will get some time before competition can provide the same level of benefits. The firm can then use this time to find another way to raise the bar. Although this response makes intuitive sense, it also raises an interesting question. If a firm were the only one providing a certain benefit, would the customer continue to be delighted with this benefit after the first time that they saw and enjoyed the benefit? In other words, do they continue to be delighted even when they are not surprised and remain loyal customers, or, as suggested by the above conceptualization, do they cease to be delighted after their first encounter with the firm? If they cease to be delighted and continue to be loyal, it would imply that if customers are delighted once, they may remain loyal for some period of time after that even though they are not surprised on subsequent occasions. This suggestion, though we have not seen any empirical evidence to date, has intuitive appeal for managers because this makes it worthwhile and practical to try and delight customers.

The issue we try to address in this paper is to examine alternative means of delighting customers, i.e., can customers be delighted if they are not surprised? If customers can be delighted without being surprised, it is possible that customers who stayed loyal to a firm after their first encounter with a surprising benefit are loyal because they are still delighted with the firm (even though they are not surprised anymore by the benefits they receive). To explore any possible alternative means of delighting customers we begin, in study one, by delving into the literature in psychology which identified joy and surprise as being the constituents of delight. We follow that with a discussion of two exploratory studies carried out to replicate and extend prior work in psychology with the purpose of gaining fresh insights into the antecedents of customer delight. In study two, we briefly review prior research on the emotion of joy in the philosophy literature where this emotion has been studied in great detail. We also bring in concepts from the neurosciences area to understand the physiological process through which a consumer might experience the emotion of delight. Based on this review, we carry out a field study that attempts to identify alternative antecedents for customer delight.

STUDY ONE

Literature Review

In the psychology literature, emotions researchers have conceptualized the emotion of delight as a complex emotion which is a blend of the basic emotions of joy and surprise (Plutchik 1980). As Plutchik's (1980) research and the circumplex model of emotion appears to be one of the earliest and most common source for labeling delight as a combination of joy and surprise, we review the work which led Plutchik to conclude that delight was comprised of joy and surprise.

Plutchik carried out two studies to determine what emotions resulted from the different combinations of pairs of basic emotions. Basic emotions were supposed to be emotions that were instinctual and universal among all human beings (or even among all mammals) and Plutchik had eight emotions which were considered basic and that made up one layer of his circumplex model of emotion. In one study, Plutchik gave a group of subjects a list of emotions and asked them to name the basic emotions that made up each of these 'complex' emotions (the complex emotions were made up of basic emotions and they could be either primary, secondary or tertiary emotions depending on whether they were comprised of adjacent pairs of basic emotions or emotions once removed or twice removed from each other on Plutchik's circumplex model). Based on converging responses from a majority of respondents, different combinations of primary emotions were said to result in particular kinds of complex emotions. For example, Plutchik's study revealed that subjects indicated that the emotion of delight would be comprised of joy and surprise. Based on this finding, Plutchik labeled delight as a tertiary emotion comprised of the basic emotions of joy and surprise and this study continues to be the main source for identifying joy and surprise as the constituents of delight.

However, what is seldom noted in the marketing literature is that in an attempt to have greater confidence in the labels that he would attach to various combinations of basic emotions, Plutchik had designed two studies. In the second study, he gave subjects two primary emotions and asked them to name the emotion that they would feel when the two primary emotions were experienced together. Interestingly, in this study there was no convergence in the subjects' responses, i.e., subjects provided various responses to describe the emotion they would experience when they felt joy and surprise together and delight was not a consistent or predominant response from subjects. This suggests that there may be other emotion terms that capture the same feelings as delight.

A close examination of Plutchik's list of basic emotions reveals that the list had only two positive emotion terms, joy and acceptance, and one neutral term, surprise. This could explain why subjects said the complex positive emotion of delight was comprised of joy and surprise. However, when subjects were told to name the emotion resulting from joy and surprise, they had no list to constrain them and hence, they came up with varied responses. Interestingly, when researchers use Izard's DES scale (Izard 1977; 1991), which has three positive/neutral emotion terms, joy, interest and surprise, delight has been found to be associated with joy, surprise, and interest (Oliver and Westbrook 1993). This raises the question whether conceptualizing delight as being comprised of joy and surprise was the unintended consequence of Plutchik's list of basic emotions having only two positive emotion terms. Could there be other positive emotion terms that could describe subjects' feelings when they were delighted? We address this question in two simple, exploratory studies that we describe below.

Method

Overview. In this study, we replicated Plutchik's two studies with one difference - we increased the number of positive emotions included in the list of emotion word combinations shown to the subjects. It was felt that if the feelings of delight were captured by emotion terms or combinations other than joy and surprise, then we might be able to gain that insight by increasing the list of positive emotion terms. Similarly, in the second study, we increased the number of positive complex emotions shown to the subjects. The purpose of this longer list was to try and identify other emotion terms that might capture the same feelings as delight (even if delight was nothing but joy and surprise).

Study 1a Method. In the first study, 50 undergraduate students enrolled in a large Mid-western University completed the questionnaire as part of an in-class assignment. The students were given a one page questionnaire which showed twelve pairs of emotions/feelings. They were told that these were emotions/feelings which may be experienced by many consumers. Their task was to suggest an appropriate name for an emotion/feeling produced by the mixture of these two emotions. They were asked "If you were to experience the two emotions at the same time, what is the one word that can capture that feeling. For example, some people might say that when they feel 'surprise' and 'anger' at the same time, they are 'outraged'. Hence, Surprise + Anger = Outrage. Now, please provide a name for the feeling/emotion resulting from the following combinations." The list of emotion words used included eight positive emotion terms, four negative emotion terms, and two neutral terms. The twelve combinations given to the subjects were: fear + anticipation, joy + surprise, sadness + anger, joy + thrill, acceptance + love, anticipation + sadness, exuberance + joy, happy + contented, joy + fear, exhilarated + joy, fear +

disgust, and acceptance + sadness.

Study 1a Results. The results from this study matched the results obtained by Plutchik and there was no convergence in subjects' responses for the main combination of interest to us, i.e., joy + surprise = ?. Subjects' responses included emotion terms like ecstatic, pleased, elated, thrilled, excitement, delighted, etc. The fifty responses included twelve different emotion terms. The only emotion term that appeared to capture the feeling of joy + surprise was the term "excitement" which was given by about 13 respondents (about 25% of the respondents).

Study 1b Method. In this study, a different group of 48 subjects were given a questionnaire containing two lists of emotion terms or feelings and told that these were feelings experienced at different times by many consumers. List A was a long list of 18 emotion terms (14 positive and 4 negative emotion terms) and list B was a short list of Plutchik's eight basic emotions. Subjects were told that their task required them to think about how they would feel as they experienced each emotion or feeling in list A and then write down which of the emotions in list B would be felt as they experienced the emotion from list A. They were given the example of outrage and told that some respondents might say that they felt the emotions of anger and surprise from list B when they experienced outrage. Subjects were told that they also had the option of writing that "No emotion from list B" adequately described their feelings as they experienced an emotion in list A.

Study 1b Results. Table 1 shows the number of subjects who said that when they experience a certain positive emotion, they would feel joy, surprise, or joy and surprise together.

Of particular interest to us was the subjects' response to the emotion of delight. Of the 48 subjects who completed this task, only 12 (25%) said that they experienced the emotions of joy and surprise when they felt delighted. Almost three times as many subjects (32 subjects) indicated that they experienced joy without any surprise when they were delighted. The other emotion terms that appeared to capture the feelings of experiencing joy and surprise together were thrilled, exhilarated and to a lesser extent, exuberant. It was also interesting to note that

Table 1
Number of Subjects Experiencing Joy and/or Surprise in Complex Emotions

Complex Emotions	Joy	Surprise	Joy and Surprise
Thrilled	43	19	17
Delighted	44	12	12
Fulfilled	34	1	1
Enthusiastic	37	6	4
Exhilarated	32	16	10
Exuberant	35	10	5
Pleased	33	3	2
Satisfied	22	1	1
Contented	17	0	0
Grateful	29	5	2

while more than 60% of the respondents felt that most of the positive emotion terms made them experience joy, the only two positive emotion terms which less than 50% of the respondents associated with joy were satisfaction and contentment. Satisfaction and contentment along with fulfilled were also the three terms that the least number of subjects (almost none) felt surprised as they experienced these emotions.

Discussion

The above results offer at least three valuable insights into the emotion of customer delight. First of all, we replicated Plutchik's work and we did find support for Plutchik's idea that if delight were to be expressed as a combination of basic emotions, then joy and surprise were the two basic emotions that constituted delight. Further, as joy and surprise were twice removed in Plutchik's circumplex model, delight would appropriately be termed a tertiary emotion. However, an interesting insight was that about two-thirds of the respondents experienced only joy (and no surprise) when they felt delighted. This lends support to the idea that there may be two different kinds of customer delight, one which involves surprising customers and one which does not involve surprising customers.

A second insight is that the study helps us identify other emotion terms which capture the feelings of customers who are experiencing joy and surprise together. This is an important finding given the present conceptualization of delight as it helps researchers interested in constructing scales to measure customer delight. This has been a problem in the area of customer delight. The results of this study might suggest items for measuring delight subject to a formal, quantitative scale validation effort.

Finally, the study also suggests a clear difference between the emotions of satisfaction and contentment on the one hand and other positive emotions like thrilled, delighted, exhilarated on the other. While one could always argue that the difference between these items lies in the amount of activation or arousal suggested by the emotion terms, our study shows that the terms also differ in the content or quality of the emotion felt by respondents. Although this study was exploratory and we suggest caution in the conclusions one draws from our results, our study provides a possible explanation for the different behavioral responses observed when customers are satisfied versus when they are delighted.

STUDY TWO

To gain deeper insights into the antecedents of customer delight (assuming joy is one of the constituents of delight) we provide a brief review of the literature in philosophy on the emotion of joy. The review is followed by a discussion of the neurological process by which customers may be experiencing delight and we use this knowledge to draw inferences about the constituents of customer delight. Finally, we describe the results of a field study that sheds some light on the possible antecedents of delight.

Literature Review

Schactel (1959) distinguishes between two kinds of joy - "magic" joy and "real" joy, thus raising the possibility that there may be two kinds of delight - one based on "magic" joy and one based on "real" joy (see results of Study 1b above). Magic joy is a short-lived experience when a person feels that the unexpected fulfillment of a wish or need can (or will) change his/her situation. The person experiencing such joy usually expects the fulfillment of the need to have come through good luck or fate and not through effort (own or other's). The other type of joy, called "real" joy, can result from any ongoing activity which brings an individual into contact, physically and/or mentally, with some aspect of the world around him/her (Schactel 1959; also see Goldstein 1951). This kind of joy is based on the activity which triggers a feeling of relatedness between a person and the stimulus, e.g. customer and a firm or product. Real joy may result from an event which was caused by one's own effort or by the effort of others. It is not dependent on the unexpected fulfillment of a wish. Thus, the event evoking "real" joy could be high or low in surprise, whereas the event evoking magic joy has to be surprising (and attributed to luck or circumstances).

The above discussion implies that customers can experience real joy on an ongoing basis from some aspect of their experience with a firm's product or service. Real joy is believed to sustain an ongoing activity (pp. 43, Schactel 1959), thus implying that customers receiving real joy from a product experience are likely to come back for the same experience. By the nature of its' origin in ongoing activities, real joy gives customers the confidence and reassurance that the source of joy is stable and will be available when they want to re-experience that feeling. This is in sharp contrast to the experience of magic joy where even as a customer experiences joy, s/he is worried whether there is something that will cut short this experience and bring them back to reality. This is very common in today's world where consumers have become skeptical about any offer that sounds too good to be true.

The biological changes accompanying the feelings of surprise and joy have also been studied by researchers (Tomkins 1962, Izard 1971). The biological changes being discussed here are those controlled by the brain stem reticular system. There are other biological changes like heart rate, perspiration rate, etc. which are controlled by the glandular-visceral system and we do not discuss these changes as they are not pertinent to the idea that we want to convey.

The feeling of surprise occurs when there is a steep increase in the rate of neural firing. It is the increase in the rate of firing that determines surprise and not the density of firing. Hence, a constant loud noise, as seen in many television commercials, may not surprise as much as an unexpected sound even if the sound is of lower intensity than the loud noise. The emotion of joy is activated by a sharp reduction in the gradient of neural stimulation (Tomkins 1962, Izard 1991). The observations about the rate of neural stimulation in joy and surprise suggests that though delight has been described as the emotion resulting from the simultaneous experience of joy and surprise, it is possible that a person first experiences surprise (increased rate of neural stimulation) and then focuses on the surprising event. Thus, the role of surprise in delight may be to focus one's attention completely on a desirable outcome and to intensify the emotion of joy produced by that outcome. This suggests that while surprise may be one way to evoke delight, there may be other ways to evoke delight, too. Any mechanism by which a person's attention could be completely focused on a desirable outcome which evokes joy is likely to be an antecedent of delight and together with the emotion of joy will evoke delight in a person.

This would suggest that any product or service that captivates a customer and gets their attention could evoke delight if the product or service features have the potential to evoke joy in the customer. Product or service experiences where the customer experiences flow (Csikszentmihalyi 1990) are also likely to be situations where the customer would experience delight if the product or service experience can evoke feelings of joy in a customer. Flow has been discussed in the context of computer-mediated environments and hence, it might be valuable to point out a potential pitfall in attempts to evoke delight in this manner. As the customer is totally immersed in or captivated by a product/service experience, any disruption in this experience that is attributed to the firm is likely to be very memorable for the customer and could result in negative reactions and behavior towards the firm and its products.

We now describe a study that compares the emotions of consumers who differed in terms of their prior exposure to a certain performance. The expectation was that if they were captivated by the performance, then they are likely to be delighted even if they had anticipated everything in the show and hence may have had low levels of surprise.

Method

The context chosen for this study was a live Irish dance performance called the "Lord of the Dance" by an internationally reputed group. Two hundred members of the audience for this show in a Mid-Western University town were randomly chosen and given a two page questionnaire at the beginning of the show. The questionnaires were handed out after the patrons were seated and they were requested to complete the survey during the intermission. At the intermission, volunteers went around the auditorium to collect completed surveys (this also served as a reminder to the respondents to complete their surveys). Participants also had the opportunity to drop off the completed surveys in boxes placed near the exit doors of the auditorium.

Sample Characteristics. Of the 200 questionnaires that were handed out, 145 completed questionnaires were returned yielding a response rate of 72.5%. The respondents varied widely in terms of age and occupation. Almost 32% of the respondents were in the age group 46-60 years, 21% were between the ages of 36-45, and the remaining respondents were almost equally split (15% in each group) among the age groups 26-35 years, below 25 years, and above 60 years. In terms of their occupations, 21% were students, 18% were business-persons, 11% were University employees, 10% were medical professionals, and the rest came from various professions like teachers (6%), lawyers, etc. 70% of the respondents were females and 30% were males.

Instrument. The questionnaire stated at the outset that the purpose of the survey was for the management of the facility to get feedback from patrons so that they could improve the quality of the services offered to the community. The survey began with three questions related to the patrons' overall level of satisfaction with their experience that evening at the venue, the facilities and services provided by the facility, and the performance they were seeing that evening. Subjects were asked to respond to these questions on a 6-point semantic differential scale where 1 was extremely dissatisfied and 6 was extremely satisfied. Next, subjects were asked a series of questions which was aimed at getting their assessment of the facilities and services provided at the venue. They were asked to indicate their level of satisfaction with specific facilities and services provided at the venue, e.g., satisfaction with parking, concession stands, restrooms, quality of the seat, etc.. This was followed by questions assessing the subjects' prior exposure to the show, the extent of their surprise and the emotions experienced by them as they watched the show, the extent to which they were captivated and aroused by the show, and their intentions to return to the venue for other shows in the future. The extent to which they were surprised was measured by a three item 7-point semantic differential scale anchored as follows: 1 (very surprised) to 7 (not at all surprised) (reverse-coded item); 1 (just as expected) to 7 (very unexpected) and 1 (just as anticipated) to 7 (not anticipated at all). Thus, subjects' scores on their level of surprise could vary from 3 to 21. Subjects indicated the extent to which they experienced nine different emotions (e.g., contented, thrilled, delighted) on a 6 point scale where 0 indicated that they did not feel the emotion, 1 indicated they felt very little of the emotion and 5 indicated that they experienced the emotion very much. The extent to which subjects felt aroused and captivated by the show was measured by a four item 5-point semantic differential scale (relaxed (1) - stimulated (5); sleepy (1) - wide-awake (5); indifferent (1) - captivated (5); and unaroused (1) - aroused (5)), and their scores on the extent of captivation could vary from 4 to 20. The survey ended by asking respondents to provide demographic information and requesting them to respond to an open-ended question which asked for their suggestions on changes that could make their experience at the venue more pleasurable.

Analysis. The reliabilities of the multiple item scales were assessed and found to be acceptable as the Cronbach alphas for these scales (surprise scale: α=0.72 and arousal scale: α=0.89) were greater than 0.70 (Nunnally 1970). Almost 60% (86 subjects) of the sample had seen the show before (either on stage, video or on TV) and 40 % had never seen the show before. Prior to comparing these two groups on the extent to which they experienced the emotion of delight and other emotions, a manipulation check was done to ensure that the two groups differed significantly on the extent to which they were surprised. *Surprisingly*, the group that had never seen the show before did not experience significantly higher levels of surprise than the group that had seen the show before (Mean levels of surprise: $M_{\text{seen show before}}$=11.1, $M_{\text{never seen show}}$=11.5, $F_{1,143}$=0.23, p>0.5).

As the purpose of this study was to investigate whether subjects could experience delight even when they were not surprised (or experience same levels of delight irrespective of their level of surprise), it was decided to split the sample into two groups - those who were not at all surprised or experienced very low levels of surprise (i.e., average score on surprise scale was less than 4), and those who experienced high levels of surprise (i.e., average score on surprise scale was greater than or equal to 4). [We also repeated this analysis after splitting the sample on the basis of subjects' response to the one item which asked them about their extent of surprise. We obtained the same results as above where we split the sample on the basis of responses to the 3-item scale.] These two groups obviously differed significantly on the extent of surprise felt by the subjects ($M_{\text{low surprise}}$ =8.00; $M_{\text{high surprise}}$=15.15; $F_{1,143}$ =199.3; p<0.01).

Results. The average score ($M_{\text{surprise for entire sample}}$=11.23) of the sample on the 3-item 7 point scale measuring surprise suggests that the overall levels of surprise were moderate. However, the entire sample experienced very high levels of the positive emotions of delight (M=4.34), thrill (M=4.32), excitement (M=4.58), and joy (M=4.28). Interestingly, the subject's mean score (M=5.91) on the 4-item 5 point arousal/captivation scale suggests that subjects were almost completely captivated by the show and felt high levels of arousal, alertness, and stimulation.

A one-way analysis of variance (ANOVA) revealed that there was no significant difference in the extent to which the emotion of delight was felt by subjects who experienced high levels of surprise compared to subjects who experienced low levels of surprise ($M_{\text{delight in low surprise group}}$= 4.45, $M_{\text{delight in high surprise group}}$=4.20, $F_{1,143}$=1.13, p>0.10). Although this result suggests that consumers may experience high levels of delight irrespective of the extent to which they feel surprised, a more stringent test of our notion that consumers could be delighted even if they are not surprised would require us to examine carefully the responses of those subjects who said they were "not at all surprised" and that the show was "just as expected" and "just as anticipated," i.e., subjects with a score of 3 on the surprise scale. We would have to show that (a) these subjects also experienced delight (the more delight they experienced, the stronger will be the support for our contention) and (b) the extent of delight experienced by these subjects is not significantly different than the extent of delight experienced by subjects who were very surprised, i.e., subjects with a score of 20 or 21 on the surprise scale. There were only five subjects who were not at all surprised (score of 3 on the surprise scale) and there were four subjects who were very surprised (score of 21 on the surprise scale). Of these nine subjects, eight provided responses about the extent to which they felt delighted and almost all of them (seven of the eight) reported experiencing identical levels of delight, i.e., very delighted or a 5 on a 1-5 scale measuring extent of delight. The only subject who reported a different level of delight was in the group that experienced "no surprise at all" and this subject also reported experiencing high levels of delight (score of 4 on a 1-5 scale). Although the low number of subjects in these extreme cells on the surprise scale may make any statistical testing of differences between these cells questionable, the data do show that subjects who were not at all surprised experienced high levels of delight and remarkably, they experienced almost the same levels of delight as those who were extremely surprised.

To gain further insights into possible antecedents of customer delight, we carried out some additional analysis.

Additional Analysis. Our exploratory study (see study 1b) and the literature review (see under Study 2) had suggested that consumers could experience delight with or without surprise, though almost all subjects experiencing delight experienced the emotion of joy. Our review of the neurosciences literature suggested that consumers are likely to be delighted if they are captivated by a stimulus that evokes joy. In the context of study 2, surprise did not have an effect on the level of delight felt by subjects. To determine whether joy and captivation influenced the extent to which subjects felt delighted, we regressed subjects' delight scores on the levels of joy and captivation felt by them. The results indicate that both joy (β=0.46, t=5.08, p<0.01) and captivation (β=0.29, t=3.24, p<0.01) had significant effects on delight, with joy having a relatively stronger effect than captivation on the emotion of delight. Together, joy and captivation explained 44.5% of the variance in the feelings of delight experienced by the subjects.

As our additional analysis suggested that captivating consumers could be an alternative antecedent of customer delight in addition to surprise which was suggested by the existing literature on emotions, we performed an analysis to see if the extent to which subjects were captivated by the show was influenced by the extent to which they felt surprised. Results of a one-way analysis of variance (ANOVA) indicate that the level of surprise had no effect on the extent to which subjects were captivated by the flow.

Discussion

The results of the two studies described above offer interesting and unique insights into the potential antecedents of customer delight. In this section, we will (a) discuss the contribution of these findings to the existing literature on delight, (b) explain or clarify unexpected results obtained in prior research on customer delight and (c) discuss the implications for managers involved in making field decisions about efforts to satisfy and/or delight their customers.

Contribution to Existing Literature on Delight. Our literature review and empirical studies found that there may be two kinds of delight which in turn, may be based on the fact that there may be two different kinds of joy. An implication of this finding is that consumers can be delighted in two different ways. One way consumers can be delighted is based on the existing conceptualization of delight in the marketing literature. This conceptualization suggests that delight is an emotion comprised of joy and surprise. The other way in which consumers experience delight is when they are captivated (or aroused) by an event which evokes feelings of joy in the consumer. The finding that consumers can be delighted even if they are not surprised is one which has considerable implications for theory and practice in marketing. Until now, even when researchers defined delight as a high arousal positive emotion, it was implicitly assumed that the high arousal was a result of high levels of surprise (e.g., see the hypothesized model of Oliver et al. 1997 where surprise is posited to lead to high levels of arousal). Our findings suggest that surprise and captivation (or arousal) can be independent, separate antecedent paths to delight customers. Our review of the neuroscience literature on the way the human brain processes emotions helps provide a theoretical account of how and why surprise and captivation can be independent, alternate paths to delight, i.e., they both serve the same function - orient the consumers attention completely to a joy evoking stimulus.

Although in this study, we have treated all the positive emotions as distinct emotions (thus measuring delight with 1 item asking consumers about the extent to which they felt delighted), our results from study 1b suggests a set of emotion adjectives that are very similar in content to the term "delight" and hence may be used to form a multi-item scale to measure customer delight. That would be a useful methodological contribution to the research on customer delight as it will be a substantive improvement to the current practice of measuring delight as the top box of an item measuring satisfaction. In fact, the results of study 1b suggest that in addition to the level of surprise, the emotional content of satisfaction and delight may be quite different, thus highlighting the need for researchers to come up with better measures of customer delight (also see Kumar and Olshavsky 1997).

Insights Into Results of Prior Research on Delight. We now consider two prior studies in marketing (Westbrook and Oliver 1991; Oliver et al. 1997) that examined consumer emotions (including delight) and use insights from our study to shed more light on the results of those studies. In the first study, Westbrook and Oliver (1991) examined the emotional content of various patterns of emotional responses to consumption experiences and the correspondence between satisfaction judgements and these emotional responses. They found two groups which experienced positive emotions and they labeled these groups the "happy/contented" group and the "delighted" group. Both these groups reported experiencing feelings of joy and the key difference was one group reported feeling surprise while the other group reported feelings of interest and not surprise. As can be expected and probably based on prior research until then, Westbrook and Oliver labeled the group which reported joy and surprise as "pleasantly surprised" and suggest that this is the "delighted" group while they labeled the group which reported joy and interest as the "happy/contented" group. However, what is interesting to note from that study is the satisfaction levels reported by subjects in the two groups were almost identical (from Table 3 of Westbrook and Oliver 1991, page 89: $M_{\text{sat of contented group}}=54.04$, $M_{\text{sat of pleasantly surprised group}}=54.00$). Westbrook and Oliver noted that although both the contented and delighted group had similarly high levels of absolute satisfaction, they differed in their emotional antecedents - joy and surprise versus joy and interest. They also state that the emotional composition of the interest dimension suggests enduring involvement and deserves to be studied further.

The results of our study fit in perfectly with Westbrook and Oliver's (1991) findings, though we would suggest a slightly different interpretation based on the insights gleaned from our study. Our results suggest that the two groups experiencing positive emotions in Westbrook and Oliver's (1991) study were both delighted consumers. Unfortunately, there was no measure of the emotion of delight in that study. The satisfaction of both of these groups was measured and found to be extremely high and almost identical. That is exactly what we would have expected if both groups were delighted. Further, our study suggests that joy without surprise could also evoke delight and this kind of delight would be characterized by an on-going relationship and a desire to continue an association. Clearly, our findings and interpretations mesh perfectly with and lend support to Westbrook and Oliver's speculation that enduring involvement may characterize the group that experienced joy and interest.

The second study by Oliver et al. (1997) examined customer delight in two different contexts, a wildlife theme park and a symphony concert. The researchers expected delight to be influenced by surprise, arousal, and positive affect in both studies and further, they expected delight to influence intentions in both studies. However, they obtained very different results in the two studies. In study 1, delight was influenced by surprise, arousal, and positive affect whereas in study 2 delight was influenced only by positive affect. Further, in study 1, delight did not have an effect on intentions whereas in study 2 delight influenced intentions as expected. Oliver and his colleagues offer various reasons to explain what they termed as "the inconsistent effect of surprise and arousal on delight". They suggest that one reason for the different results could be the different manner in which surprising consumption was measured, i.e., in study one, they measured surprising levels of satisfaction while in study two, they measured surprising levels of performance. The authors speculate that the subtle difference in meaning in the two measures could be responsible for the different results. Another suggestion made by the authors is that the different results could be "simple data artifact."

Our research suggests that Oliver et al.'s findings are consistent with what we would predict based on our theory. As our theory suggests that delight based on real joy is likely to be attributed to someone or something other than luck and is likely to be characterized by desires to maintain an on-going relationship, this kind of delight would be related to intentions. Recall that delight based on real joy was not based on surprise. Similarly, delight based on magic joy was expected to be short-lived and attributed to luck. This kind of delight may or may not be related to consumer intentions and hence is not suggested as a framework for a firm's strategic planning activities. In the Oliver et al. (1997) study 1, it is very possible that different subjects were experiencing different kinds of delight (some may have experienced both kinds of delight). For example, a subject unexpectedly seeing a grizzly bear may experience joy and the fulfillment of a life long desire. This chance event may not lead this person to want to come back to the park. On the other hand, some subjects may enjoy the natural beauty of the park and feel they are in harmony with nature and experience joy. This feeling of relatedness or connection with the source of joy (i.e., the park) may lead these subjects to want to return to the park. Thus, the relationship between delight and intentions could depend on the kind of delight subjects felt.

Managerial Implications. Our research suggests that a very meaningful way for firms to try and delight customers is to try to do it through an on-going activity which physically and/or mentally engages the customer with the firm or its products and services. This on-going activity can then trigger a feeling of relatedness between the customer and the firm and this feeling of relatedness evokes "real joy" and delight. The reason it is desirable for firms to evoke delight in this manner is that customers who experience this kind of delight attribute the source of their delight to either their own effort or to the effort of others but not to luck or chance. This is a very important point for firms to note because if customers attribute the source of their delight to luck or chance, firms will not reap any benefits by delighting their customers. On the other hand, if customers attribute the source of their delight to a firm or its products, services or employees, then the customer will want to continue his/her relationship with the firm and do more business with the firm.

Thus, our research strongly encourages firms interested in delighting customers to not only focus on surprising customers at every transaction but to identify and focus on activities that are at the core of an on-going relationship between the customer and the firm. For example, a hotel can try to delight their customers by leaving a box of chocolate on a guest's bed as that would be a pleasant surprise for the guest when he/she returns to the room after a day full of business meetings. On the other hand, the hotel could try and identify activities that are at the core of the relationship between the hotel and a guest who is a business traveler. These activities are likely to be things the hotel can do to anticipate the business person's needs in the hotel room in a pro-active manner and make those available even without the guest having to ask for it. While it is true that the first time the guest experiences such hospitality, he/she may be surprised but the hospitality becomes the basis of an on-going relationship between the hotel and the customer and in future, the guest will continue to be delighted as long as the hotel nurtures this relationship by pro-actively engaging in activities that focus on the hospitality provided to the guest (even if these activities do not lead to surprising outcomes for the guest). In fact, it may be more feasible and fruitful for the firm to identify such activities and attempt to delight their customers than trying to surprise the customer each time (e.g., with a chocolate on the bed).

A firm could also think of ways to have a customer totally engaged in the consumption of the product or service and enjoy having this relationship with the firm or even a brand. In such cases, the firm's activities lead to an on-going relationship, which is often interactive, between the customer and the firm and the sense of relatedness emanating from these activities triggers feelings of delight in the customer. In recent times, consumer researchers have turned their attention to such activities and the sense of engagement resulting from such activities has been termed "flow" (Csikszentmihalyi 1990). We speculate that as flow implies the consumer is immersed and engaged in an enjoyable task, such tasks would evoke feelings of delight that are based on "real joy" and hence the consumer will want to come back to maintain that relationship with the firm or its offerings.

The results of our study offers managers, for the first time, a strong theoretical reason to pursue customer delight as a strategic objective and not just a tactical device aimed at getting short-term gains like a short-term jump in sales or market share (e.g., by offering a one-time deal that is too good to be true). As we pointed out in the introduction to this paper, managers have always found it difficult to base a business strategy around the idea of constantly surprising the customer. Most managers believe that there are practical limitations to implementing a strategy which calls for surprising the customer at every transaction. The results of our study suggest that firms may not have to constantly surprise their customers at every transaction to keep them delighted. In this respect, we disagree with Oliver et al.'s (1997) speculation "that only the most unexpected levels" of satisfaction (as in their study 1) or performance (as in their study 2) will initiate the delight sequence. Our research actually suggests that it may be more desirable to evoke delight by having customers totally engaged with your products (and their performance) instead of attempting to surprise them at every interaction with the firm. In fact, this conceptualization of delight may make the concept of delight meaningful even in a business-to-business context. Typically, we do not expect much emotional response in evaluating business-to-business transactions. However, we feel in business-to-business contexts, it may be meaningful to explore customer delight using Westbrook and Oliver's (1991) notion that enduring involvement with a product or a firm may influence consumers' emotional responses.

Finally, from a strategic perspective, delighting customers could be made a goal in which every department of the firm can play a role because *any ongoing activity* which brings the customer into contact with the firm or its offerings has the potential to be a source of delight. Thus, firms can set goals for each department to identify ways in which they can delight their customers (may be external or internal customers). This might imply that firms high on inter-functional coordination will have more opportunities to delight their customers than firms that are low in inter-functional coordination (see Market Orientation literature for more on this construct, e.g., Kohli and Jaworski 1990, Narver and Slater 1990).

To summarize, we undertook this research to explore alternative antecedents to delighting customers. We feel we have identified some alternatives and hope our research offers insights for researchers and managers interested in exploring the construct of customer delight.

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THE ROLE OF SURPRISE IN SATISFACTION JUDGEMENTS

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ABSTRACT

Empirical findings suggest that surprise plays an important role in consumer satisfaction, but there is a lack of theory to explain why this is so. The present paper provides explanations for the process through which positive (negative) surprise might enhance (reduce) consumer satisfaction. First, the arousal that is part of the surprise reaction can contaminate subsequent positive affective reactions or emotions about the product or service. Second, the surprise reaction allows for a strong focus on a single product or service aspect. This will create more accessible knowledge that may have a disproportionate effect on memory-based satisfaction judgements. In addition, several possible moderators of the surprise-satisfaction relationship are described. Finally, the managerial implications of the proposed processes and moderators are discussed.

INTRODUCTION

It has been argued that merely satisfying customers is not enough: "businesses need to move beyond mere satisfaction, to customer delight" (Rust et al. 1996, p. 229). Delight is considered to be the highest level of customer satisfaction and translates into better outcomes (e.g. higher customer retention) than can be achieved through other levels of satisfaction (Oliver et al. 1997; Rust et al. 1996). Theoretically, it has also been suggested that positive surprise is a necessary condition for consumer delight (e.g. Oliver et al. 1997; Rust et al. 1996). The very idea that surprise and delight are related was already suggested by the empirical work of Plutchik (1980). This author found that delight results from a combination of two first-order emotions: surprise and joy. Westbrook and Oliver (1991; Oliver and Westbrook 1993) also report some indirect evidence for the "positive surprise-satisfaction" link. Using cluster analysis on the emotions consumers experienced during products/services consumption, both of these studies brought to light a cluster with high scores of surprise and joy ("pleasantly surprised consumers"). Further analysis of satisfaction scores showed that these pleasantly surprised consumers were more satisfied than the consumers from any other group. An exploratory study by Oliver et al. (1997) may also be considered as support for the "positive surprise-satisfaction" link. The authors found a causal path "arousal ⇒ positive emotions ⇒ satisfaction." However, a closer look at the way they measured "arousal" reveals that their study actually supports the "surprise ⇒ positive emotions ⇒ satisfaction" path. Arousal was measured with two items which are two of the three items of the DES scale (Izard 1977) for surprise.

The studies mentioned above all suggest that surprise plays an important role in consumer satisfaction. However, these studies have not provided definitive empirical support for the surprise-satisfaction relationship. Some of these studies use methods that do not provide results to determine causal relationships, and all of the studies are based on events that were surprising in retrospect. In addition to these methodological issues, no conceptual framework exists that allows for predictions about the effect of surprise on satisfaction. This is because, as yet, no theory has been developed about the possible psychological processes involved in the surprise-satisfaction relationship. Some authors have asked that surprise be investigated in a marketing context (Derbaix and Pham 1989) and complained about the lack of a theoretical framework for the emotion of surprise (Oliver et al. 1997; Westbrook and Oliver 1991). Recently, a few attempts have been made to look at the role of surprise in a marketing context (e.g., Derbaix and Vanhamme 2000; Vanhamme 2000; Vanhamme et al. 1999). The present paper elaborates on this scarce literature, and also provides a theoretical framework about the possible psychological processes through which consumer satisfaction may be enhanced by surprise.

THE EMOTION OF SURPRISE

Based on, for example, Charlesworth (1969), Ekman and Friesen (1975), Izard (1977) and Plutchik (1980), most recent studies carried out on surprise (e.g. Reisenzein et al. 1996; Schützwohl 1998) consider surprise to be a neutral (i.e. neither positive nor negative) and short-lived emotion. However, some authors do not share that point of view (e.g. Ortony et al. 1988). The reason is largely due to the lack of consensus, in psychology, on what is an emotion. Ortony et al. (1988), for example, consider that surprise is not an emotion because it is neutral. According to these authors, emotions should have a valence (i.e. either positive or negative). Here, we adopt the view that is predominant in all recent articles published on surprise in psychology, i.e. that surprise is a neutral emotion (e.g. Reisenzein 2000, Meyer et al. 1997).

The emotion of surprise is elicited by either unexpected or misexpected products/services/attributes (e.g. Ekman and Friesen 1975; Scherer 1984) i.e., more precisely, a "schema discrepancy" (e.g. Meyer et al. 1991; Meyer et al. 1997; Reisenzein 2000). *Unexpected* denotes vague and not well-defined expectations about the products/services/attributes whereas *misexpected* denotes precise expectations about the products/services/attributes that do not occur. A *schema* is a private, normally informal, inarticulate, unreflective theory about the nature of objects, events or situations (Rumelhart 1984). It contains variables and interconnections among variables. Variables represent the characteristics of a given concept (e.g. wheels, lights, etc. for a car) and are specified by constraints that define the normal range of possible values of the variable (e.g. wheels are necessarily round whereas lights may be round or oval); interconnections specify how variables relate to one another (e.g. lights are on the front and the back of a car, on each side, near the wheels) (Schützwohl 1998). In order to have a proper representation of the reality, individuals continuously check whether their schema matches the inputs coming from the surrounding environment. This check is, however, rather unconscious (Scherer 1984). As soon as inputs diverge from the schema, surprise is elicited. Schema discrepancy is seen as the crucial cognitive surprise-eliciting condition (e.g. Gendolla 1997; Stiensmeier-Pelster et al. 1995). Interestingly, Schützwohl (1998) showed that the stronger the variable constraints are, the stronger surprise is when a divergence occurs (see Schützwohl 1998, for more details). The strength of the variable constraints is determined by the frequency of the activation of the schema (e.g. how often the person sees a car) and by the variability of the variables in the past (e.g. how often the shape of the wheels varied in the past). If the variability is low, the constraints become tighter and more rigid with an increasing number of schema activations and vice versa (Schützwohl 1998). Variable constraints are not the only elements that can influence the intensity of surprise. Gendolla (1997) has shown, for example, that personal relevance (i.e. whether the "divergent" event is important or not for the person) also influences the intensity of surprise: the higher the personal relevance, the stronger surprise tends to be.

It should be noted that another theoretical causal framework for surprise – the attributional model (Weiner 1985) - has been suggested in the literature. According to this model, unexpected events do not elicit surprise but elicit causal search and attributions. If attributions are attributions to chance, then surprise is elicited but not otherwise. However, this model has been strongly criticised by Stiensmeier-Pelster et al. (1995) who pointed out several theoretical problems related to it (For example, in the attributional model, surprise remains an epiphenomenon. This is at odds with the properties of surprise and with Weiner's view

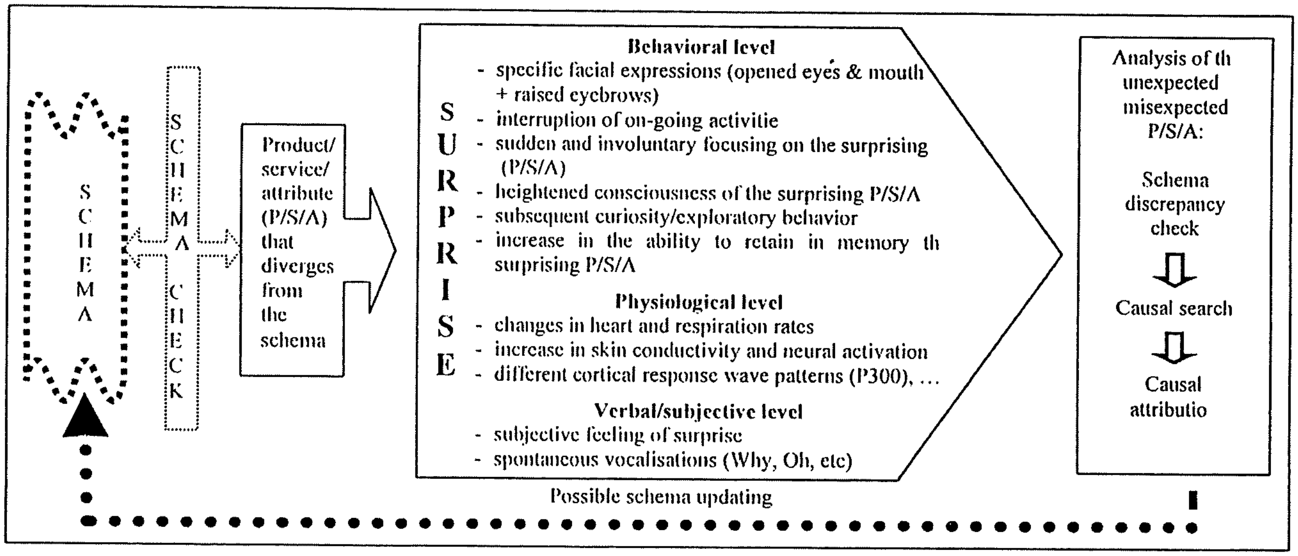
(1986) itself, which assumes that emotions are important motivators of action). Stiensmeier-Pelster et al. (1995) and Gendolla (1997) also provided some empirical evidence that did not support the attributional model. Therefore, like recent work on surprise (e.g. Reisenzein 2000), this article adopts the 'schema discrepancy ⇒ surprise' causal framework.

It should be emphasized that surprise should not be identified with the awareness of a schema discrepancy, which is a "cold" cognition (Stiensmeier-Pelster et al. 1995, p. 9). Surprise is a syndrome of reactions, i.e. a specific pattern of reactions at the *subjective* (e.g. subjective feeling), *physiological* (e.g. changes in the respiration and heart rates) and *behavioral* levels (e.g. raised eyebrows and exclamations of surprise) (Meyer et al. 1997; Reisenzein 2000; Reisenzein et al. 1996). At the behavioral level, one major characteristic of surprise – besides its specific facial expression - is the interruption of ongoing activities (e.g. Meyer et al. *1991*). Tomkins (1962), for example, describes surprise as a "general interrupter to ongoing activities" and contends that "this mechanism is similar in design and function to that of a radio or television network which enables special announcements to interrupt any ongoing program" (Tomkins 1962, p.498). A similar argument is provided by Izard (1991) who considers that the function of surprise is to clear our nervous system of ongoing activities that would interfere with adjustment to a schema discrepancy in our environment. A spontaneous focusing of attention on the schema discrepant event follows the interruption of activities and results in a heightened consciousness of the surprising stimulus at the expense of other stimuli (the potential of interference of those stimuli is therefore limited) (Charlesworth 1969; Niepel, et al. 1994). The interruption of ongoing activities, the focusing of attention and the heightened consciousness of the surprising stimulus are supposed to help the individual to process the surprising event (Schützwohl 1998). Linked to the focusing of attention, surprise also results in a better retention in memory of the surprising stimulus (e.g. Meyer et al. 1997). Eventually, surprise also gives rise to exploration / curiosity behavior (which may also be coupled - at the subjective level - with "why?" questions) (Charlesworth 1969). Figure 1 gives an overview of the components of the emotion of surprise at each level.

Even though the traditional and widespread "syndrome of reactions" concept advocates a strong association between the emotion components, several studies have shown that the different components of emotions are only weakly associated or even not significantly associated; such is also the case for surprise. This dissociation would advocate for a "looser" version of the syndrome of reactions concept (Reisenzein 2000).

Scherer (1984) assumes that each emotional state is the result of one or more sequential stimulus evaluation checks (SEC). The five sequential SEC he describes are: 1) schema discrepancy; 2) intrinsic pleasantness or unpleasantness; 3) goal relevance; 4) coping potential; 5) norm compatibility. The label "surprise" results from the first SEC, i.e. the schema-discrepancy check. However, as a result of the evaluation of the pleasantness / unpleasantness of the experience - which follows straight after the evaluation of the schema discrepancy -, the emotion of surprise is often followed by another emotion that colors it either positively (e.g. surprise + joy) or negatively (e.g. surprise + anger) (Ekman and Friesen 1975). This explains why people talk about *good or pleasant surprise* and *bad or unpleasant surprise.* If no positive or negative affective reaction follows surprise (i.e. none of the SEC numbered from 2 to 5 elicited a valenced affective reaction), surprise remains uncolored. 'Uncolored' surprise seems to be infrequent in the case of consumption/purchase experiences, though (e.g. in the diary study by Vanhamme (2001), only 5% of the surprising experiences collected remained uncolored). In the rest of this article, we will use the terms 'positive surprise' and 'negative surprise' to qualify the emotion of surprise followed by, respectively, positive and negative affective reactions.

Figure 1
The Emotion of Surprise



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Finally, surprise results in processes such as a causal search and causal attribution (e.g. Stiensmeier-Pelster et al. 1995) that aim at eliminating the schema discrepancy and lead, if necessary, to the updating of the relevant schema (e.g. Reisenzein et al. 1996). If the schema is updated, the same stimulus is not likely to elicit surprise once again since it becomes part of the schema and thus it is expected. Note that surprise is by itself enough to *initiate* the causal search, but the length and intensity of the search will depend on the perceived benefits and costs linked to this cognitive effort. Perceived costs and benefits are influenced by factors such as the importance and valence of the event, the access to information, the amount of effort that is needed, and the amount of time that is available (Stiensmeier-Pelster et al. 1995; Pyszczynski and Greenberg 1987).

CONSUMER SATISFACTION

Satisfaction has become one of the most studied concepts in post-purchase/consumption processes because of its managerial relevance: it has, for example, been shown to influence word-of-mouth, customer attitude, and customer retention (e.g. Oliver 1980; Swan and Oliver 1989). The concept of satisfaction has been defined in several ways, sometimes quite differently. For example, some authors consider satisfaction as an emotion, i.e. something purely affective (e.g. Westbrook 1980; Woodruff et al. 1983), whereas other authors have reduced it to a purely cognitive comparison (e.g. Bloemer and Kasper 1995; Churchill and Surprenant 1982). At this stage in time, however, it is acknowledged that customer satisfaction is neither purely affective nor purely cognitive (e.g. Oliver 1997; Price et al. 1995).

Different types of satisfaction have also been defined: (1) *consumer's transaction specific satisfaction* - i.e. evaluation of a specific purchase or consumption occasion (e.g. satisfaction with the dinner I had at the Pizza Hut restaurant today), (2) *consumer's brand satisfaction or consumer's* *overall satisfaction* - i.e. overall evaluation based on many experiences of the same kind (e.g. satisfaction with the Pizza Hut restaurant), (3) *microeconomic satisfaction* - i.e. satisfaction of all consumers at the firm-level - and (4) *macroeconomic satisfaction* – i.e. satisfaction at the level of a society or a culture (Anderson and Fornell 1994; Oliver 1997). However, most studies analyzing the processes underlying satisfaction formation (i.e. antecedents of satisfaction) have focused on the *consumer's transaction-specific satisfaction* (e.g. Churchill and Surprenant 1982; Oliver 1980; Oliver and Desarbo 1988). Furthermore, some authors (e.g. Evrard 1993; Aurier and Evrard 1998) believe that the satisfaction concept only refers to this first type of satisfaction. Like the studies mentioned above, the focus of this paper is on *transaction-specific satisfaction*. Following several authors (e.g. Aurier and Evrard 1998, Evrard 1993, Plichon 1998, Shieff et al 2000), we define this type of satisfaction as a *psychological – and relative - state resulting from a buying and/or consumption experience*. This definition takes into account (a) the *dual character of satisfaction* - i.e. satisfaction is both cognitive and affective - and (b) its *relativity* - i.e. satisfaction is the result of a comparison between a subjective experience and an initial reference base. This principle of comparison has notably been well established in the so-called *expectation-disconfirmation paradigm (*Oliver 1980, see below). Despite its dual character, satisfaction should not be confused with an *attitude*. Attitude is relatively stable over time and general (e.g. anyone can have an attitude toward the last Spielberg movie without having seen it) whereas satisfaction is transitory and specific (i.e. satisfaction is related and posterior to a specific consumption/buying experience: one has to see the last Spielberg movie to evaluate one's satisfaction with it). Nonetheless, those two concepts are not independent: attitude is both an antecedent and a consequence of satisfaction (Evrard 1993; Oliver 1980). Since, as mentioned by Oliver (1981, p. 51), "satisfaction soon decays into (but nevertheless greatly affects) one's overall attitude toward purchasing products", a measurement of satisfaction immediately after the consumption/purchase experience would provide the best construct validity (LaBarbera and Mazursky 1983).

Several theories and models about the formation of customer satisfaction have been put forward. Most of them, however, are adaptations (i.e. variants or improvements) of the original *expectation-disconfirmation paradigm* (Churchill and Surprenant 1982; Evrard 1993). According to this paradigm, customer satisfaction is caused by the disconfirmation between prior expectations, i.e. the standard of comparison, and the perceived performance of a product or a service [P/S here after]. As Westbrook (1987, p. 260) clearly explains it: "expectancy disconfirmation can range from positive (obtained outcomes exceeds those expected) to neutral (obtained outcomes exactly meets those expected) to negative (obtained outcomes fall short of those expected)." Disconfirmation was originally considered as a mediator between expectations and performance (Evrard 1993). Different measures of 'objective' and 'subjective' disconfirmation have been developed. The former one is usually defined as a difference of scores between performances and expectations. The latter one is a subjective (not numeric) evaluation of the difference between expectations and performances (measured by asking, on a scale, to what extent performance was better than / worse than expected). The subjective disconfirmation is used in most studies and has been shown to better explain satisfaction judgements (Oliver 1997).

Refinements have led to the inclusion of a direct link between performance and satisfaction and between expectations and satisfaction (e.g. Bolton and Drew 1991; Churchill and Surprenant 1982). Disconfirmation remained, however, the variable that accounted for the largest part of explained variance in satisfaction (Churchill and Surprenant 1982). Furthermore, several models used another standard of comparison, as for example experienced-based norms (e.g. Woodruff et al. 1983) or schemata (Stayman et al. 1992).

Later models of satisfaction formation also included *attributions, equity,* and *quality* as additional causes of satisfaction (e.g. Oliver and Desarbo 1988; Oliver 1994). Attributions are what people perceive as the cause of their own behavior, the behavior of others and the events occurring (Bitner 1990); equity is the evaluation of the fairness of the exchange based on the comparison between the seller and the buyer costs/benefits ratio (Oliver and Desarbo 1988) and quality is *"a judgement of performance excellence; thus a judgement against a standard of excellence"* (Oliver 1997, p. 28). However, these additional variables only helped clarifying the cognitive mechanisms at work in the satisfaction formation.

Westbrook (1980) was the first to introduce affective variables as antecedents in models of satisfaction formation. In a later study (Westbrook 1987), this author showed that pleasant and unpleasant emotions influenced customer satisfaction and that this relationship was not mediated by disconfirmation and expectations beliefs. After his work, several others started to investigate the affective mechanisms involved in satisfaction judgements (e.g. Mano and Oliver 1993; Oliver 1993; Oliver et al. 1997). Affective variables, and more specifically emotions, were shown to add considerably to the explanatory power of the satisfaction model (e.g. Oliver 1993; Westbrook 1987). However, these studies have not analyzed the specific role of the emotion of surprise on satisfaction, although it is often suggested that surprise is an emotion that can lead to extreme levels of satisfaction (e.g. Oliver et al. 1997; Rust et al. 1996). Disconfirmation (i.e. a cognition that summarizes the recognition that the performance of a P/S is better or worse than expected) is unlikely to encompass all aspects of the emotion of surprise that can influence satisfaction and is thus worth studying on its own. There can be instances in which consumers will experience surprise AND disconfirmation but also cases in which consumers will experience surprise without disconfirmation or disconfirmation without surprise (see the results of the diary study by Vanhamme (2001) for empirical support of this proposition). Products or services that are completely unexpected (e.g. an exotic type of food that the individual has never seen, tasted or heard about) are not likely to elicit disconfirmation. In those instances, "because product performance expectations may be only vaguely defined, there may be little cause for disconfirmation" (Oliver 1989, p. 10). However, such instances will trigger off surprise because this type of food falls outside the possible range of variation of any variables of the individual's schema. In contrast, performances that are within a certain range of variation might create disconfirmation but not surprise if the constraints of the schema are flexible. For example, an investor who has bought stocks several times and has experienced - for his past purchases - fluctuations of 2-3% around a forecasted growth rate of 12% will not be surprised when the stock he just bought increases by 15% instead of 12%. This is because the constraints of his schema were flexible, since the real growth rates happened sometimes to be 2-3% higher or lower than forecasted during the previous activations of his schema. However, the investor would still experience positive disconfirmation because the growth rate was more than expected.

PROCESSES THROUGH WHICH SURPRISE LEADS TO ENHANCED SATISFACTION

We now turn to the suggestion that consumer satisfaction may be enhanced by surprise (e.g. Oliver et al. 1997; Rust et al. 1996). As we already said in the introduction, this suggestion is based on the empirical work of Plutchik (1980) and Westbrook and Oliver (1991; Oliver and Westbrook 1993), where it is found that delight (i.e. highest level of favorable satisfaction) results from a combination of surprise and joy. Although this work does not provide definitive empirical support, it does indicate that surprise and satisfaction are somehow linked. But given that surprise is a neutral emotion, having no positive or negative valence on its own, how can it exert a positive effect on the consumer's satisfaction level?

Before investigating the possible processes linking surprise to satisfaction, it is worth mentioning how memory is involved in any kind of judgement process (such as satisfaction). Hastie and Pennington (1989) have distinguished three types of judgement processes:

a) *On-line* judgements: during the consumption/buying experience, consumers encode inputs from the environment in their working memory. The relevant inputs are then processed in order to form a satisfaction judgement. After a while, the inputs and the satisfaction judgement may be transferred to long-term memory. When the consumers are then asked to report on their level of satisfaction, they retrieve the judgement from memory.

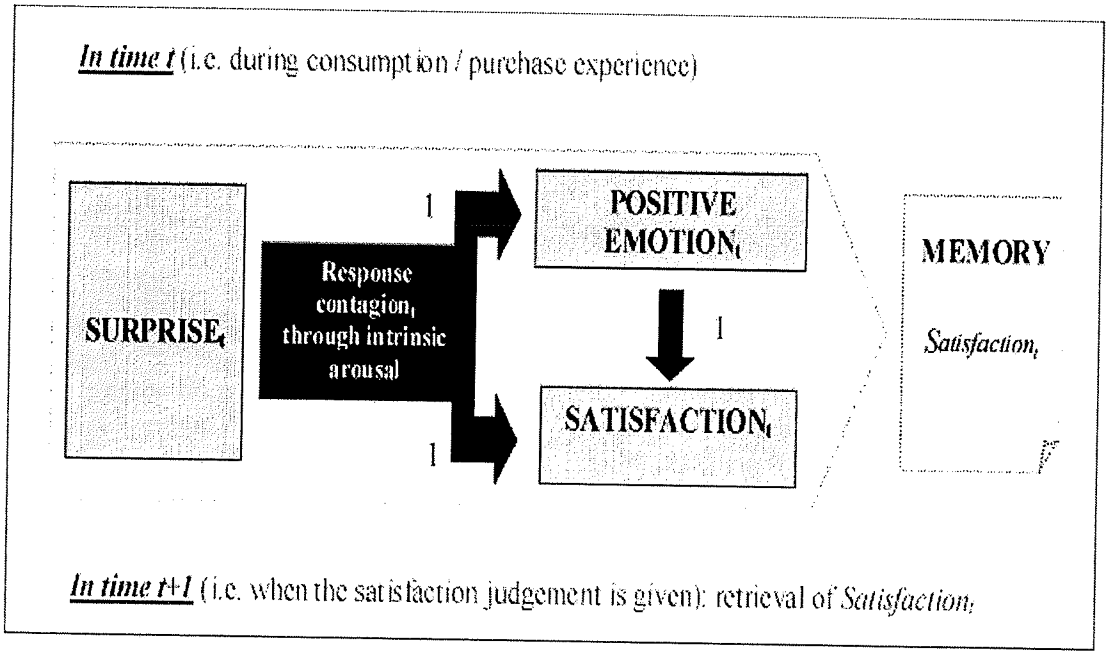
b) *Memory-based* judgements: inputs from the environment are encoded in the working memory and, after a while, transferred to long-term memory without any processing. When a satisfaction judgement is requested, the relevant material is retrieved from the memory and processed.

c) *Inference-based* judgements: this third type of process is a mixture of on-line and memory-based processes. Inferences are made on-line on the basis of inputs from the environment (e.g. evaluation of the hotel location, evaluation of the decoration), and these inferences are encoded in the memory. When a satisfaction judgement is requested, these inferences are retrieved from the memory and processed.

The role of surprise in the judgement process may be very different according to the type of process. We start with the first possibility, that surprise has an impact on an on-line judgement of satisfaction (see figure 2). The high arousal that is inherent in surprise is known to be able to amplify subsequent affective reactions (Charlesworth 1969; Desai 1939). Thus, someone who has just been surprised by an unexpected positive event will experience more joy than someone in a similar situation who has not previously been surprised. This characteristic of surprise can be explained by the theory of excitation transfer in which residues of activation from prior stimulation combine with excitation in subsequent stimulation; the combined activity is then expected to intensify the emotional experience during the subsequent stimulation (e.g. Zillmann 1983). Interestingly, Oliver (1997) suggested that different levels of satisfaction notably differed in their level of arousal: the higher the satisfaction level (e.g. delighted), the higher the intrinsic level of arousal contained in the satisfaction response. Within this framework, the relationship between surprise and consumer satisfaction would lie in the high arousal level that is part of the surprise reaction. This high arousal level would amplify subsequent emotions about the P/S, such as joy, and these, in turn, may enhance the satisfaction level of consumers. Theoretically, surprise might also directly influence the satisfaction response since satisfaction is partly affective; see above. Previous research also shows that a combination of surprise and joy leads to very high levels of satisfaction (e.g. Oliver and Westbrook 1993; Westbrook and Oliver 1991).

In this case, we may think of the relationship between surprise and satisfaction as 'response contagion' (after Nutin and Beckers 1975), since it can be portrayed as an effect of the intrinsic arousal of surprise on a judgement of satisfaction that is independent of memory retrieval of the surprising stimulus or inferences that consumers may make on the basis of the surprise. Instead, the arousal that is part of surprise can be seen as contaminating the experience of subsequent emotions, such as joy, which in turn would impact on the judgement of satisfaction. In a similar way, the intrinsic arousal of surprise would also directly contaminate the affective component of satisfaction. If satisfaction is an on-line

Figure 2
On-line Judgement of Satisfaction



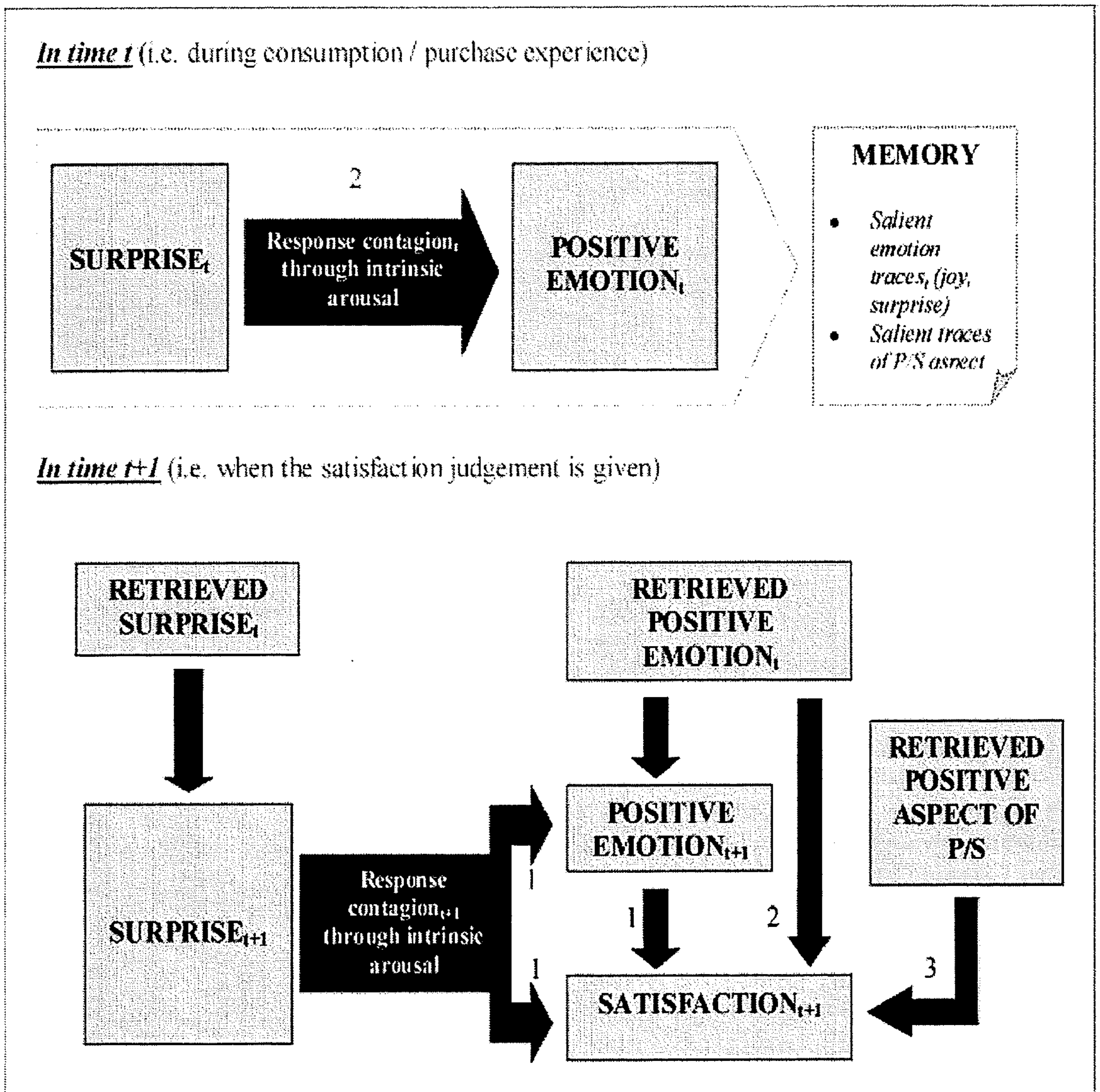
Legend.
(1) *Response contagion$_t$*: Through its arousal, surprise$_t$ contaminates the affective component of satisfaction$_t$ and positive emotion$_t$. Positive emotion$_t$ is incorporated in the judgement of satisfaction$_t$.

judgement, response contagion would be the most probable explanation for surprise effects on satisfaction. Note that response contagion works on the basis of the higher arousal level that surprise creates. Therefore, it does not matter that surprise itself is neutral (i.e. neither positively nor negatively valenced), what matters is the valence of subsequent affective reactions that are amplified by surprise. For example, if a chocolate egg would break surprisingly quickly (which is neither negatively nor positively valenced), but one finds a toy in the egg that is (unsurprisingly) pleasing, the surprise of breaking the egg will enhance the pleasure felt by finding the toy.

A second possibility is that satisfaction is a memory-based judgement (see figure 3). In that case, a satisfaction judgement is constructed using knowledge about P/S performance that is retrieved from memory. Response contagion may also be operative in memory-based judgements. Again, the intrinsic arousal of surprise may make the experience of a subsequent emotion more intense, and when a satisfaction judgement is constructed, a more intense positive emotion will be retrieved from memory. Moreover, when the memory of an emotional episode is brought to mind, it may to some degree have the capacity to elicit the same emotions (Cohen and Areni 1991). These, in turn, may have a positive influence on satisfaction.

However, response contagion is not the only explanation for the relationship between surprise and satisfaction for memory-based judgements. An alternative explanation may be based on the greater accessibility in memory of surprising P/S aspects. Emotions experienced during purchase or consumption produce strong memory traces. The more intense the emotional response is, the more

Figure 3
Memory-based Judgement of Satisfaction



Legend.

(1) *Response contagion$_{t+1}$*: Surprise$_t$ and positive emotion$_t$ are re-elicited, surprise$_{t+1}$ contaminates positive emotions$_{t+1}$ and the affective component of satisfaction$_{t+1}$. Positive emotion$_{t+1}$ is incorporated in the judgement of satisfaction$_{t+1}$

(2) *Response contagion$_t$*: Surprise$_t$ contaminates positive emotion$_t$, and the contaminated positive emotion$_t$ is stored in memory. When a satisfaction judgement is given in t+1, positive emotion$_t$ is highly accessible in memory due to the amplification effect of surprise and is thus more easily retrieved and incorporated in the final satisfaction judgement.

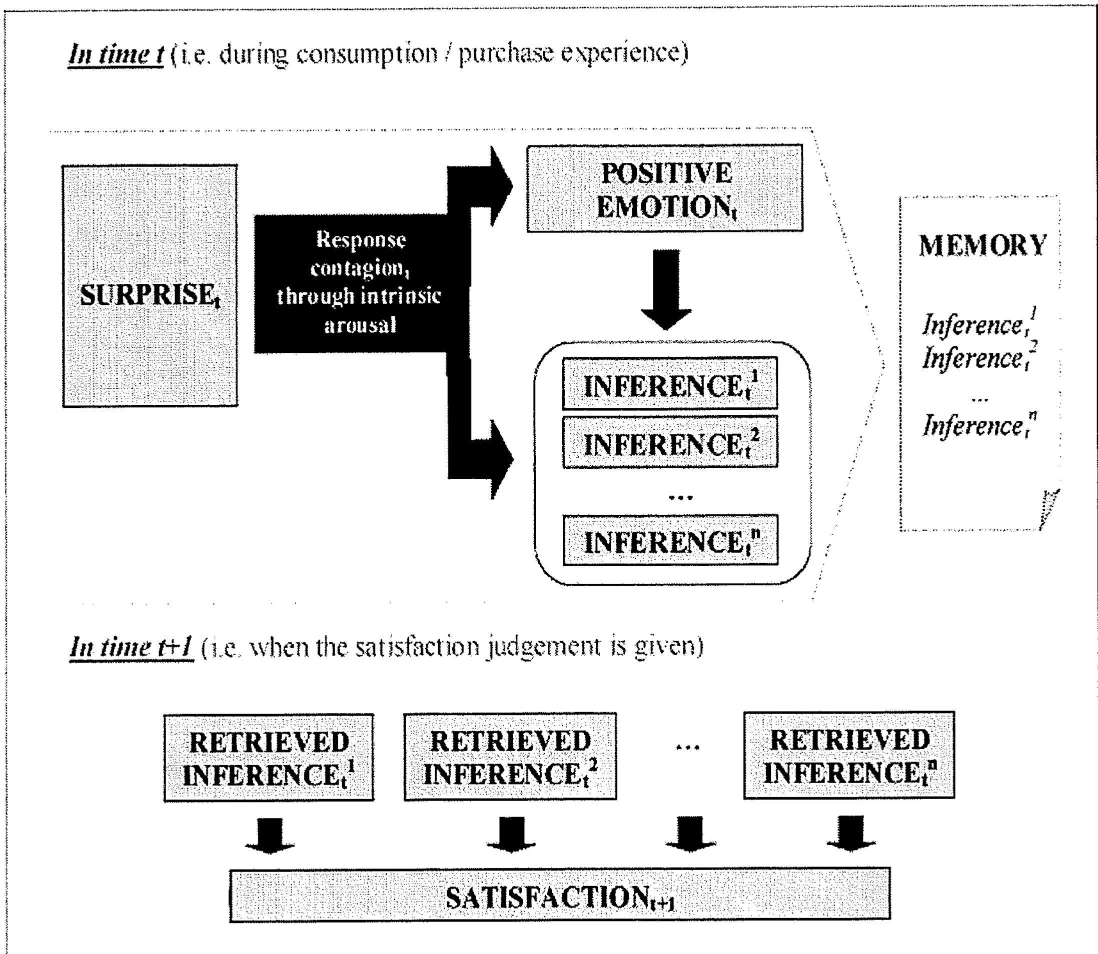
(3) *Knowledge accessibility*: The surprising P/S aspect has left stronger memory traces and, compared to non-surprising aspects, it is more likely to be evaluated in time t+1. It thus has a disproportionate share in the final satisfaction judgement.

salient the trace is (Izard 1977; Tomkins 1980; Westbrook 1987). Among the emotions, surprise stands out in particular as an emotion whose purpose is to interrupt any ongoing activity and allow people to take in as much information as possible about a target in the environment (Charlesworth 1969; Darwin 1872). The result of this is that surprising events leave stronger traces in memory (e.g. Meyer et al. 1997) and are thus more easily retrieved. Research on social perception and judgement shows that more accessible knowledge about a stimulus will disproportionately influence the judgement about the stimulus (Bruner 1957; Higgins 1996; Wyer and Srull 1989). Applied to consumption/buying experiences with P/S, this implies that positively valenced P/S aspects (i.e. a P/S aspect that elicits positive affective reactions either during encounter or during retrieval of the event) will have a larger impact on memory-based satisfaction judgements if they are surprising. If the P/S aspect is surprising, it is much more likely to be processed at a later stage, and the positive valence that the P/S aspect acquires will have a disproportionate share in the final satisfaction judgement. Thus, surprise will provide greater accessibility of the P/S aspect, and this will lead to a higher satisfaction level for positively valenced P/S aspects. We will call this possible relationship between surprise and satisfaction a 'knowledge accessibility' effect, after Bruner (1957). Again, for memory based satisfaction judgements, it should not matter that the initial surprise is neutral, what matters is the valence of P/S aspect.

A third and last possibility is that satisfaction is an inference-based judgement (see figure 4). In this case, aspects of the P/S are evaluated on-line during the consumption experience and these are encoded in memory. It is likely that surprise will influence inference-based satisfaction judgement through response contagion and knowledge accessibility. Namely, the increased arousal that stems from the surprising stimulus may contaminate the positive affective reactions elicited during the encounter with the P/S and, as a result, influence the evaluations of the P/S aspects in a positive way. Thus, more positive evaluations would be retrieved from memory. Surprise can also make a positive evaluation of a product aspect more accessible, and this, in turn, may increase the probability that that aspect will be retrieved from memory.

The above mentioned theoretical arguments and empirical findings strongly suggest that positive surprise may play an important role in consumer satisfaction. If this is so, it would also be interesting to investigate the effect of negative surprise on satisfaction. It seems likely that both mechanisms described above (contagion and knowledge accessibility) are likely to operate on negatively surprising experiences in a similar way (i.e. surprise will amplify subsequent negative emotions and increase the accessibility of negatively valenced aspects of the experience) and lead to lower levels of satisfaction (compared to non-surprising experiences of the same kind). The shape of the relationship between surprise and satisfaction for negatively and positively surprising experiences would, however, *not necessarily* be symmetrical (i.e. the same level of negative and positive surprise would not necessarily lead to exactly the same level of impact on satisfaction). It has been suggested in the literature that negatively valenced information receives more weight than positively valenced information (Fiske 1980). The reason that is provided for this is the relative infrequency of negative events (compared to positive events), so that negative events stand out. It could therefore be argued that the impact of negative surprise is asymmetrical to the impact of positive surprise: negative surprise would have a stronger impact on satisfaction than positive surprise. However, a counterargument is that both positively *surprising* and negatively *surprising* information would stand out due to surprise. This argument would favor a symmetrical (but opposite) effect on satisfaction for negative and positive surprise. Further empirical investigation is thus needed to conclude whether or not the relationship between surprise and satisfaction is symmetrical for positive and negative valenced P/S aspects. So far, the empirical work by Plutchick (1980) is the only study known to the authors that investigates the combination of surprise with negative emotions.

Figure 4
Inference-based Judgement of Satisfaction



Legend.
(1) *Response contagion*: Surprise$_t$ contaminates positive emotion$_t$ and the evaluative component of inference$_t^{1 \ldots n}$. Positive emotion$_t$ is incorporated in the evaluative component of inference$_t^{1 \ldots n}$.
(2) *Knowledge accessibility:* Inferences based on the surprising P/S aspect are more accessible and have a disproportionate share in the final satisfaction judgement.

For example, he has shown that surprise and anger lead to 'outrage' and that surprise and sadness result in 'disappointment'. Interestingly, Schneider and Bowen (1999) have conceptualized *outrage* as the mirror image of customer delight and believe that outrage leads to defection and 'terrorism' (i.e. the outraged customer tells his story to other customers and perhaps exaggerates it with each retelling). This last conceptualization would suggest a symmetrical relation between positive and negative surprise.

In the previous paragraphs of this section, the processes through which surprise influences satisfaction have been described. However, nothing has yet been said about the relative frequency of the different processes – on-line, memory-based and inference-based – in consumption/buying experiences. According to Hastie and Pennington (1989), people often process information on-line but some will postpone their *final* judgement until later. In other words, on-line and inference-based judgements are common, and pure memory-based judgements seem rather seldom. In addition, surprise itself may also enhance the likelihood of on-line processing since surprise leads to a focusing of attention and to more cognitive processing (causal search, etc., see above). As a result, a surprised consumer is likely to make more inferences 'on the spot' (about different aspects of the P/S, for example) and he or she may therefore also be more likely to process his/her final evaluation of satisfaction on-line. Factors such as involvement may also lead to more frequent on-line processing of satisfaction. Suppose a consumer has just bought the car of his/her dreams (i.e. highly involved) and it breaks down on his/her way home. In this case the consumer is likely to evaluate immediately – i.e. on-line – his/her level of dissatisfaction with the car. At the other extreme, the consumer who strikes a match that goes out immediately (due to poor quality) will probably not bother evaluating his/her level of dissatisfaction or make any inferences on the spot; s/he will just strike the next match.

Factors such as mood, time pressure, task difficulty, motivation, etc., are known to influence both the type of processing, and the instant the judgement is constructed, which makes it is difficult to give general rules about the type of judgement that will be made. Nonetheless, the type of processing is not beyond management control. The procedures used for experimental manipulation in social judgement research to elicit a particular type of processing may readily be translated to the marketing setting (see Hastie and Park 1986). Suppose that a shop surprises its customers by helping them carry their groceries to the car park. It may then want to stimulate its customers to form on-line satisfaction judgements about the store by placing a poster with "satisfied or reimbursed" near the store exit. The positive surprise (carrying groceries) is then most likely to have a disproportionate effect on the consumer's satisfaction with the whole store.

MODERATING FACTORS THAT INFLUENCE THE RELATIONSHIP BETWEEN SURPRISE AND SATISFACTION

The possible mechanisms through which surprise influences satisfaction have been delineated in the previous section. We now turn to the variables that may affect the direction and/or strength (or even existence) of the relationship. These variables can be categorized as P/S related factors, consumer related factors and context related factors.

Product / Service Related Factors

Studies carried out on satisfaction have shown that the strength of the relationship between some antecedents of satisfaction (e.g. disconfirmation, performances) and satisfaction differed according to the kind of P/S that was used in the study (Evrard 1993). Non significant relationships were found for some P/S whereas strong significant relationships appeared for other P/S. For example, Churchill and Surprenant (1982) found a significant relationship between disconfirmation and satisfaction for plants (i.e. non durable good) but a non significant relationship between these two variables for video-disc players (i.e. durable good). Thus, the type of P/S could be a potential moderator, and research on the surprise-satisfaction relationship should be based on more than one single product or service to avert a mono-operation bias. It is, however, worth noting that the real moderator might rather be related to the respondent's involvement with a specific P/S category, i.e. a consumer related factor (see hereunder).

Consumer Related Factors

A number of consumer related factors can moderate the relationship between surprise and satisfaction. Companies that decide to go for a "surprise strategy", should definitely take the following variables into account, since the effectiveness of their strategy may depend heavily on the type of consumers who are in the targeted market segments. Involvement is one consumer related factor that has been presented in the satisfaction literature as a moderator of the relationship between satisfaction and its antecedents (Babin et al. 1994; Evrard 1993; Oliver 1997). High involvement has been shown to elicit an increased arousal (Bloemer and de Ruyter 1999; Celsi and Olson 1998). As a result, the arousal that stems from high involvement would combine with the intrinsic arousal of surprise and lead to stronger effects on satisfaction than in a context of low involvement.

Another possible moderator variable is mood, because this variable has also been shown to moderate the relationship between satisfaction and its antecedents (Oliver 1997) - especially in low involvement contexts (Babin et al. 1994). Positive mood would tend to have a positive halo effect on satisfaction (Cohen and Areni 1991), which would combine with the positive impact of surprise on satisfaction (for a positively surprising experience) and reinforce the effect of surprise. On the other hand, negative mood would tend to have a negative halo effect on satisfaction which might reduce or counteract the positive effect of surprise on satisfaction (for a positively surprising experience). It should, however, be borne in mind that surprise itself is likely to increase the situational involvement and, as a result, reduce (or annihilate) the potential moderating impact of mood on the surprise - satisfaction relationship.

Personality and expertise are two other variables that have been suggested as potential moderators of the relationship between satisfaction and its antecedents and might also moderate the surprise-satisfaction link. For example, extravert consumers - i.e. consumers who are generally under-aroused and seek excitement from social interaction or external stimulation in order to reach their optimal level of stimulation (Oatley and Jenkins 1996) - might exhibit a stronger surprise-satisfaction link than introvert consumers who already have enough inner arousal and try to ensure that nothing increases their level of arousal. With respect to expertise, it could be argued that the more a consumer is an expert in his/her field, the less likely s/he will be guided by his/her emotions. Therefore, the surprise-satisfaction relationship would be less strong than for non expert consumers. Note that expert consumers are also more likely to have a more rigid schema (unless the P/S is not standardized at all, i.e. its attributes are highly variable) and, as a consequence, if they are surprised, their level of surprise would be higher than for non expert consumers (see above). Thus, experts may be characterized by rare and strong surprises, while non-experts might experience more frequent, but weaker surprises.

Other potential moderators suggested in the satisfaction literature are sex and age (Varki and Rust 1997). These variables could, therefore, also moderate the surprise-satisfaction relationship. As far as sex is concerned, some studies report sex differences in emotional experiences. For example, women tend to endorse more <u>extreme</u> (positive and negative) affective responses than men (Derbaix and Pham 1991). Women might thus display a stronger surprise-satisfaction relationship than men. With respect to age, some studies have shown that older people become 'experts' on emotions, i.e. they show greater emotional complexity, enhanced self-regulation and understanding of emotions than younger people (Rimé et al. 1998). Their sensitivity to emotional influences might therefore be reduced (or more controlled) and, as a result, a less strong relationship between surprise and satisfaction would appear than for younger people.

Context Related Factors

It can be argued that the effect of surprise on satisfaction will be moderated by the comparison relevance of the judgement situation, which can influence the type of mindset that consumers are in while evaluating their satisfaction.

Recent empirical work by Stapel, Koomen and Van der Pligt (1997), and Stapel and Koomen (2000) shows that *accessible knowledge* is more likely to produce assimilation effects when the context of judgement activates an interpretation goal (e.g. evaluation of the meaning or usefulness of the surprising P/S aspect) and contrast effects when the context of judgement activates a comparison goal (e.g. comparison with another P/S bought previously, comparison with the other P/S that were evaluated in the shop, comparison with the P/S the neighbors purchased). Putting people in a context that activates an interpretation goal was found to lead to judgements that are more extremely positive or negative, while activation of a comparison goal was found to lead to less extreme judgements.

Presence or absence of P/S alternatives may well provide a context that favors or inhibits comparison making. However, presence or absence of alternatives is not the determining factor, since people are found to make comparisons with internalized reference standards when alternatives are absent (Hsee and Leclerc 1998; Kahneman and Miller 1986). What seems to be the determining factor is the type of mindset, comparison or interpretation, that people are in. These mindsets can be triggered even by seemingly unrelated contextual factors that activate particular goals prior to the judgement of satisfaction. For example, in Stapel and Koomen (2000), reading the word *understand* [*comparison*] is enough to trigger an interpretation [comparison] mindset.

For inference-based and memory-based judgements, the above means that a positively [negatively] valenced consumption/purchase episode should lead to a higher [lower] level of satisfaction if *the context of judgement* facilitates interpretation goals than if it facilitates comparison goals. Note that the context of judgement may or may not be *the context of the consumption/purchase*. It depends on how long after the purchase/consumption the judgement of satisfaction is constructed. The comparison relevance of the satisfaction judgement context may thus moderate the effect of surprise on satisfaction through the process of knowledge accessibility. Contexts low on comparison relevance may reduce the effect of surprise on satisfaction, while contexts high in comparison relevance may enhance it.

Comparison goals may be more active in pre-purchase/consumption situations, during which the consumer gathers information about the P/S or visits several locations to buy the P/S (i.e. the P/S is actively compared with several choice alternatives), whereas interpretation goals may be more active in (post-)purchase/consumption situations, during which the consumer is getting to know the P/S and trying out its various uses. While purchasing or consuming, the consumer is usually 'face-to-face' with the P/S and is guided by the desire to satisfy his/her needs. Moreover, satisfaction judgements are given after purchase or consumption (e.g. Aurier and Evrard 1998; Evrard 1993; LaBarbera and Mazursky 1983; Oliver 1997). Therefore, the sooner (after consumption/ purchase) the satisfaction judgement is constructed, the more likely the activities prior to the evaluation of satisfaction will be driven by interpretation goals.

This distinction between pre-purchase and (post-)purchase situations should, however, not be taken very strictly. This is because contrastive comparison effects may also be triggered by a number of consumer and product related factors. First, knowledge of a whole range of product alternatives may be chronically accessible to experts who are enduringly involved in the product category (Higgins, King and Mavin 1982, Thorndyke and Hayes-Roth 1979), and this should favor contrast effects. Second, even high occasional involvement may create contrast effects, because subjects may only then want to exert the greater cognitive effort that comparison making takes (Babin et al. 1994, Gilbert et al. 1988). Finally, contrast effects can be stimulated by the level of abstraction of the surprising P/S aspect itself, since concrete information is found to facilitates comparisons more than abstract information (Stapel et al. 1997).

It is worth noting that the concept of comparison relevance of a judgement situation is commonly referred to as a context factor (e.g. Stapel, Koomen and Van der Pligt 1997, Stapel and Koomen 2000). However, since it influences the type of mindset that consumers are in while evaluating their satisfaction, it could be argued that the real moderator is the type of mindset, i.e. a consumer-related factor, rather than the comparison relevance of the situation.

Other context related factor are likely to moderate the surprise - satisfaction relationship. However, most (if not all) of them will have an impact on the relationship between surprise and satisfaction through the consumer related factors discussed above. For example, a contextual factor like advertising or word-of-mouth can trigger involvement and/or enhance consumer expertise levels, and these can have moderating effects on the relationship between surprise and satisfaction.

CONCLUSION AND DISCUSSION

The goal of this paper was to discuss how surprise can enhance satisfaction. This has led to the identification of a number of different ways in which the suggested relationship may be operative. If satisfaction is an on-line judgement, surprise is most likely to affect satisfaction through response contagion. If, on the other hand, satisfaction is a memory-based or inference-based judgement, surprise may also enhance satisfaction on the basis of knowledge accessibility. Even though it has been suggested in the literature that surprise enhances satisfaction, no empirical results have convincingly validated this proposition. Thus, further research should first show that a relationship exists between surprise and satisfaction, be it as on-line judgement or a memory-based or inference-based judgement. If additional research provides clear evidence for a relation, we can then turn to the specific psychological processes that underlie it. This would also have managerial relevance, since control of the type of processing is possible, and an enlarged understanding of what is going on will help companies to put surprise to various uses.

Experiments seem an appropriate methodology for the purpose of disentangling the relationship between surprise and satisfaction. This would allow the manipulation of surprise experienced by the respondents in a consumption-buying context and the measurement of its causal impact on their levels of satisfaction (e.g. a product or service with a new feature that is not announced prior to the consumption experience). The type of processing can also be manipulated as explained above (i.e. telling the consumers that an evaluation of their satisfaction is expected would lead to an on-line satisfaction judgement; distracting them while they are consuming the P/S would induce a memory-based processing of satisfaction and telling them to evaluate the attributes of the P/S such as the quality/price ratio, the aesthetics would lead to inference-based satisfaction). This type of manipulation would reveal the (possibly differential) impact of surprise according to the type of satisfaction processing.

Another point is that the relationship between surprise and satisfaction may be moderated by several variables that are related to the P/S, the consumer (involvement, mood, sex, age, expertise and personality) or the context (comparison relevance/type of mindset). The influence of these variables should be controlled for when investigating the surprise-satisfaction relationship. These elements should also be considered by companies, while selecting their strategy, i.e. to go for a 'surprise strategy' or not. A surprise strategy may not be the most appropriate strategy for every kind of company. It depends on the P/S it sells and its customer basis. For example, the gain in satisfaction for a company selling completely standardized products (i.e. products for which it might not be easy to introduce some surprising elements) to medical experts (i.e. people who will probably not be so much influenced by their surprise) will probably not make up for the costs of surprising them. Once decided to go for a surprise strategy, care should also be taken of the customer related factors (i.e. involvement, sex, age, mood, expertise, personality), and the context of the surprising event (i.e. the mindset that customers are most likely to be in) that may influence the impact of surprise.

Finally, the focus of this paper was on aspects of surprise that are relevant for satisfaction judgements. We have thus limited our discussion of the role of surprise to those instances where consumers have bought or used the P/S. However, surprise may also be employed usefully in marketing outside this particular scope. For example, surprise may aid consumer learning and direct information gathering in pre-purchase situations (In psychology, surprise has been shown to play a crucial role in learning (Charlesworth 1969)). Another aspect that has received little attention here is the social function of surprise. For example, sales people and experts may socialize consumers about what 'should' and 'should not' be expected by showing their (acted) surprise about certain new product features. These examples show that surprise has a relevance for marketing that is beyond the scope of the present paper.

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CUSTOMER TENURE, RECOMMENDATION AND SWITCHING

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ABSTRACT

In relationship marketing, the circumstances under which customers recommend services to others are of major importance. We report an exploratory study of two services, which addressed three questions related to recommendation: (1) How voluntary were the service switches? (2) What proportion of the switches was based on recommendation? and (3) Did recommendation rates decline or increase with the duration of customer tenure? We found that a substantial proportion of switching arose in circumstances over which respondents had little control. When switching was voluntary the main reason given for the choice of a new supplier was recommendation. The rate of recommendation of the current supplier *declined* with the duration of customer tenure for both services. This last finding suggests that recently acquired customers may have been undervalued in relationship marketing.

INTRODUCTION

Influence can occur via three routes: social (word of mouth, emulation), individual (personal search) or though the mass media (marketing communications, editorial). We focus on positive word-of-mouth (WOM) communications, also known as recommendation and advocacy.

Individuals vary in their propensity to advocate goods and people whose advocacy recruits new customers have more value to a supplier than those who exert little influence on others. Sometimes referral programs give incentives to existing customers to make introductions (Biyalogorsky, Gerstner and Libai 2001) but we are concerned here with naturally occurring social influence that occurs without incentives. More specifically, we are concerned with the way recommendation rates vary in the customer base. Strong advocates must be identified if these unpaid salespersons are to be targeted and used in marketing. If we know the characteristics of strongly recommending customers, we can use databases more effectively to keep these customers and to assist them to recommend.

Recommendation is clearly an important influence. Rosen and Olshavsky (1987) found that recommendations could be used to reduce both the range of alternatives and the attributes that were assessed; thus, the advice of others can simplify and speed up choice. Brown and Reingen (1987) reviewed some early studies, which showed that WOM is the dominant effect in cases involving adoption and switching of new products. More recently, Keaveney (1995) found that recommendation was the method for selecting a new service supplier in about 50% of the cases studied. In the United Kingdom, Cody (2000) has reported similar figures for choice of dentists; 46 percent of dental patients attributed their selection to recommendation although 21 percent had grown up with their dentist and never made a choice. If they had to find a new dentist, 65 percent stated that they would use recommendation.

In a paper on the definition of loyalty, Dick and Basu (1994) suggest that repeat purchase is one of the factors that will promote recommendation. Thus more repeat purchase, indicated by a longer tenure as a customer, might be expected to raise the rate of recommendation. Similarly, Reichheld (1996) suggests that one of the ways that long-standing customers contribute more value than recent customers is by referring more new customers. Figure 1 shows how Reichheld presents the different contributions to profit as customer tenure increases. This chart has been widely quoted in textbooks such as

Heskett, Sasser and Schlesinger (1997). However, Reichheld's work seems to be based more on casework than systematic research and Dick and Basu's (1994) proposals are not supported by evidence.

Evidence is required on whether the rate of recommendation rises with customer tenure, as Reichheld's work implies. Strictly, Reichheld considers customer referral rather than recommendation. We define referral as *new customers acquired in whole or in part by recommendation*. Ideally, we would investigate referral since this is more directly related to customer value but this would require respondents to know of their success in turning a recommendation into a customer gain and this is difficult to establish. We have therefore restricted ourselves to the recommendation rate and focused on two services, supermarkets and hairdressers; these differ in the quality of the interpersonal contact between supplier and customer, and this factor may be related to recommendation. We examine the rate of recommendation as a function of both the customer's duration of tenure and their attitude toward the service. We also investigate how often recommendation is cited as the reason for choosing the customer's current supplier and we assess the freedom of choice of customers when they select a supplier.

THE ROLE OF RECOMMENDATION IN SWITCHING

Although the effects of WOM are widely accepted, it is difficult to assess how much effect this form of influence has. This lack of precision is connected to a number of factors. One problem arises from sector differences such those between services, durables, and groceries. This has several aspects. One is *constraint on choice* (Bendapudi and Berry 1997). Often, service accessibility may compel switching and WOM can have little effect when the customer has little or no choice. Lack of choice occurs, for instance, when a preferred outlet closes. Another sector difference relates to the *other channels of influence* that are available. Reichheld (1996) suggests that credit card companies rely more on advertising and less on WOM than some other services, but we lack systematic evidence across categories on how the main influence channels (marketing communication, consumer search and recommendation) contribute to selection. More than one influence channel can operate in a decision and there may be interactions between channels, e.g. recommendation may employ facts from advertising. We expect WOM to be related to other aspects of the mix too, such as price, product specification, and availability since these also provide content for recommendation.

Services also vary in the degree of *interpersonal contact* that occurs. The provider may service the person (as in dentistry), his/her possessions (as in car servicing) or there may be little direct contact (as in supermarkets). The contact between customer and supplier can be friendly and personally oriented or detached and impersonal and Mittal and Lassar (1996) have described this quality of the contact as *personalization.* The level of interpersonal contact seems likely to be associated with the use of recommendation; for example, hairdressing switches might be more dependent on referrals than supermarkets. Another sector difference is *usage frequency*; products that are used daily, and are thus more salient, could be recommended more often than those that are infrequently used. On this basis, supermarkets would be recommended more often than DIY stores. Also, the provision in a sector may be more or less homogeneous; the more varied the provision, the more scope for recommendation.

Finally, there may be sector differences that relate to *obsolescence and renewal rates*; a product that becomes unfashionable, or which lacks new technical features, is less likely to be recommended. Conversely, when the product is prone to change, such as a fashion shop, recommendation may be maintained.

Our knowledge is also limited by the way the research questions have been framed. Questions about switching can invite responses about the failure of the previous product, the superiority of the current product, or the effect of intervening information channels that serve to define the choice set and thus focus selection. Because questions can be put in different ways, answers may apply to one or more of these aspects of switching. For example, Keaveney's (1995) research focused on defection from a supplier. She found eight reasons for switching and recommendation was not one of these. However, Keaveney also examined how customers came to replace the service they had rejected. Eighty-five percent of her respondents had found a new supplier. Of these, approximately half had used 'word-of-mouth, references and referrals', about 20 percent used active external search and about 20 percent used advertising and promotions.

TENURE, ATTITUDE AND RECOMMENDATION

Claimed Relationships

As illustrated in Figure 1, Reichheld (1996) shows a rising return from referrals as customer tenure increases but it is not clear how this might occur. Clearly, the longer the period of tenure, the more the number of recommendations that will be made. Also, any recruits may make further referrals and thus produce a "pyramid sales" effect. But neither of these effects favors the retention of established customers over the recruitment of new customers. To demonstrate the superiority of established customers, we must show that they *currently* provide more referrals than would be provided by new customers. This depends on the rate of recommendation of established and new customers and the conversion rate of any recommendations into recruited customers.

There is no direct evidence on how recommendation rates change with tenure. Gremler and Brown (1999) conducted a study of recommendations by customers of banks and dental practices. They found an increase in the total number of recommendations with duration but, when we divided the number of recommendations by duration, it appeared that the rate of recommendation declined from the start of the relationship. However, this is weak evidence since it is prey to recall errors, which will have different effects over different periods. A better procedure is to ask customers whether they have recommended a service in the last year (or other interval) and then to relate this to how long they have retained the service. This is what we did in the study reported later.

Underlying Processes

What processes might be involved in any association between the rate of recommendation and duration as a customer?

Four processes might increase recommendation with tenure. *First,* those who like a brand strongly are likely to stay as users longer and the concentration of these people in the long-term segment could raise the rate of advocacy of the brand if advocacy is associated with liking. This is a survival bias effect. *Second,* self-perception effects could raise the association between recommendation and customer tenure (Bem 1967). Self-perception inverts the normal causal order between retention and recommendation. Those who hear themselves recommending a product may infer that they like it and will therefore continue to buy it. These two effects thus depend upon a rise in evaluation with tenure. *Third,* increases in expertise with tenure could be associated with recommendation. This could also be mediated by increases in evaluation of the product. A *fourth* process depends on an increase in use of products with tenure; there is some evidence that long-term customers narrow the portfolio of brands they use so that surviving brands are used more heavily (Carroll and Rose 1993). Gremler and Brown (1999) found that the recommendation rate was somewhat higher among heavier users of banks and dentists.

Three processes could raise the rate of recommendation on first acquisition of a product, resulting in a decline in this rate with customer tenure. *First*, customers exhaust their contacts and this reduces the scope for recommendation after a period as a customer. *Second*, customer tenure may correlate with product obsolescence and this suggests that the grounds for recommendation of a specific product will diminish over time. (But conversely, some services, such as fashion shops, regularly renew the offering so that recommendations can be made afresh, even to those who have already received recommendations about previous merchandise.) *Third*, it is commonly found that those who have recently acquired a product tend to show more interest in it and this acquisition arousal could raise recommendation [The arousal after purchase is often described as a dissonance effect (Festinger 1964) but this may be mistaken. Dissonance is a negative condition and occurs when a people have *insufficient* justification for a choice (Brehm and Cohen 1962), often because it was difficult to decide between alternatives. However, the difficulty of consumer choice may be over-stated; one study of car purchase found that only two percent of buyers found the choice difficult (Pearce 2000). It seems more likely that most consumers experience a positive arousal rather than dissonance when they acquire a new product. Either way, the arousal occurs on acquisition and this leads us to think there would be more recommendation at this point.]. Richins and Root-Schaffer (1987) suggested that involvement in the product raises the level of WOM and Richins and Bloch (1991) found that high involvement customers showed a decline in satisfaction with their new cars over the first two months of ownership. We should avoid equating satisfaction, involvement and arousal but this evidence is suggestive. After some time as a customer, habit is likely to set in and, in this low involvement condition, consumers are less likely to volunteer information.

Objectives

This review suggests that, although we expect recommendation to relate positively to attitude, no clear prediction is possible about how recommendation rates are related to the duration of customer tenure. In our empirical study we examine recommendation of two common retail facilities, supermarkets and hairdressers. We seek evidence on three issues:

1. How voluntary is choice? Often location limits the services that can be used.
2. How often is recommendation cited as the main reason for choosing a new supplier, compared with other reasons? We expect that this reason will be more common for hairdressing than for supermarkets; hairdressers provide a more personalized service than supermarkets and this suggests that there will be more recommendation of hairdressers.
3. How does the rate of recommendation vary with attitude to the service and duration as a customer?

RESEARCH

Procedure

Telephone interviewing was employed using random dialing to two telephone exchanges in two London districts. Invalid, industrial, answer machine and facsimile machine numbers were discarded. Those who did not use supermarkets were excluded. Respondents sometimes refused to answer or suggested another time and this resulted in a response rate of 20 percent. One hundred female respondents were obtained in this way and data from the two districts were combined for the analyses. All respondents were asked about both supermarkets and hairdressers. Five respondents claimed to have no hairdresser, or no previous hairdresser, leaving 95 respondents in this category.

Questions

With regard to supermarkets, respondents were asked: how long they had been with their main store, their *main* reason for switching to this store, whether they had recommended their main store in the past year, and their attitude to the store. Corresponding questions were then asked about their hairdresser. Age and income bands were also obtained. Respondents were not given response alternatives except, on a few occasions, when these were specifically requested. This procedure allowed the respondent to give either their reasons for defecting from the previous service or their reasons for opting for the current service.

Results

Reasons for Switching. We have divided the reasons given by respondents into those where the switch was made necessary by external circumstances and those where the reasons suggest choice on the part of the respondent. Table 1 indicates that many of the switches were necessitated, or at least pressured, by circumstances; this is particularly so in the case of supermarkets (56 percent versus 34 percent for hairdressers). The two main pressures for switching are moving home or changes in supplier availability.

Table 1
Reasons for Switching

Supermarkets	%	Hairdressers	%
Necessity:	*56%*	*Necessity:*	*34%*
Moved home	26	Moved home	18
New store built nearby	17	Closure of hair salon	16
Store closure	12		
Lift to store	1		
Choice:	*43%*	*Choice:*	*65%*
Recommendation	31	Recommendation	42
Range, quality, service	6	Hair looked awful, out of fashion	16
Not open convenient times	2	Regular hairdresser not available	2
Avoiding high prices	2	Avoiding high prices	2
Other	2	Other	3

In the case of hairdressers, 42 percent claimed that the main reason for switching was recommendation, which contrasts with 31 percent for supermarkets. However, when recommendation was computed as a share of the voluntary reasons, it emerged as a slightly stronger reason for switching supermarkets (72 percent versus 65 percent).

Recommendation and Tenure. Table 2 shows that the likelihood of recommending the store or hairdresser is related negatively to the duration of customer tenure in both cases. When respondents had been using the service for less than 12 months, we still asked about recommendation in the last year. This means that the reported rate of recommendation for the under-six months group of respondents probably understates the true annual rate.

Table 2
Recommendation in Last Year by Duration of Customer Tenure

	Supermarkets		Hairdressers	
Duration of customer tenure	N	% segment recommending	N	% segment recommending
<6 months	14	93	12	92
6-12 months	24	100	18	100
1-2 years	34	94	29	97
2-8 years	15	54	24	67
>8 years	13	31	12	50
Total	**100**		**95**	

The simple association between attitude and recommendation was less clear; there appeared to be some positive effect for hairdressers but none for supermarkets. Logistic regression was used to establish the contribution to recommendation of different factors. Neither income nor age was significant. When attitude and relationship duration were entered, the Cox and Snell pseudo-R^2 was 30 percent for supermarkets and 25 percent for hairdressers. The logistic coefficient for customer duration was significant for both supermarkets and hairdressers ($p<0.0001$ and

$p<0.001$ respectively); attitude was not significant for supermarkets but was significant for hairdressers ($p<0.003$).

DISCUSSION

WOM effects are likely to depend on many factors: the respondent's freedom of choice, whether customer retention or acquisition is under investigation, the novelty and changeability of the product, and whether the WOM is positive or negative. We also expect WOM to interact with other marketing variables, such as advertising and price. To complicate matters further, it is difficult to study WOM as it occurs and researchers have to rely on consumers' reports of their behavior. Not surprisingly, work on recommendation is still poorly developed and rather exploratory. We have three principal findings to discuss. *First*, many switches of hairdresser and supermarket are involuntary or only partly voluntary. *Second*, recommendation is the main reason given for switching in these fields. *Third*, recommendation is negatively related to the duration of the relationship.

How Voluntary is Switching?

In the services chosen, involuntary switching was caused in roughly equal measure by house moves and by the opening and closing of facilities. Our data showed that a substantial proportion of switching was not freely chosen (56 percent supermarkets, 34 percent hairdressers). This is much higher than Keaveney's finding that 6 percent of critical switching incidents were involuntary but differences in method and choice of service industries may explain this. We chose services that are strongly affected by location. When an outlet closes, customers *have* to switch. But some environmental pressures encourage but do not compel action. Customers are not forced to switch to a more convenient store or hair salon when this is opened and we should, perhaps, not classify this as necessity. Such switching could be averted if there were superior quality, service or lower prices in the current outlet, or by the strength of the social relationship when the service is personal, as in the case of hairdressing. Despite this, the accessibility of an outlet appears to be a powerful influence; marketers, using the tools of price, promotion, and quality, can make only limited headway against this strong control on behavior.

The Importance of Recommendation

Our study reveals that recommendation is the main reason given for switching (42 percent for hairdressers and 31 percent for main supermarkets). When the less voluntary switches are excluded, the proportions are even higher at 65 and 72 percent. The fact that there is little difference in the importance of recommendation between supermarkets and hairdressers was contrary to our expectation. This finding suggests that the one-to-one relationship in hairdressing may have less effect on recommendation than we supposed. We shall understand this better when a wider range of services has been studied. Supermarkets are frequently used and one possibility is that heavily used services get more recommendation. It also seems likely that the telephone interviewing method can affect the reason given for switching. More than one reason can apply and the one that is more easily recalled is likely to be favored when there is no visible response format. If a written questionnaire is employed, with personal search, advertising, and recommendation supplied as possible sources of information, social demand effects may affect the response. It seems likely that this would favor personal search.

The figures above are commensurate with Keaveney's (1995) evidence that 50 percent of new service suppliers were chosen on the basis of WOM. Keaveney's evidence appeared as a minor aspect of her paper. Most of her paper is concerned with reasons for not retaining customers and these reasons did not include recommendation. There is a danger that the pursuit of customer retention will lead to the neglect of customer acquisition. Lost customers are mostly acquired by other suppliers and we need to understand the substantial role of recommendation in this process.

This evidence of the strong effect of recommendation in service selection does not mean that other elements in the marketing mix have only marginal effect. We assume that recommendations are made *because of* price, quality, service, or accessibility and that advertising may provide information that helps customers to frame a recommendation. Marketers need to give attention to the way in which customer recommendations use content from advertising copy and other mix factors.

Attitude and the Duration of Customer Tenure

The Attitude Measure. Our study reveals that attitude to the service is significantly associated with recommendation only in the case of hairdressing and here the effect was weaker than that of tenure. The weaker effect of attitude may be because this was not measured *relative to alternatives* as suggested by Dick and Basu (1994). The measure used was:

Do you rate shopping in your main store as ...
Very good [1]
Good [2]
Adequate [3]
Unsatisfactory [4]

It would have been better if this measure had been prefixed with a phrase such as '*Compared with other stores*'. We anticipate that a relative measure will show a stronger association with recommendation and further research in this field should use the relative form of measurement.

Spending on Acquisition Rather than Retention. Our work suggests that recent customers recommend more than longer-term customers do, so that customer acquisition carries an advantage over retention in this respect. We do not measure the conversion of recommendations into referrals but it seems unlikely that differences here could reverse the strong effect we observed. Despite this, it will pay to adopt a strategy of retention rather than acquisition in many fields because of other considerations, particularly customer acquisition cost. However, in retail industries, acquisition costs can be modest since there are no induction costs when customers begin. Thus, in the case of industries like hairdressing and supermarkets, it seems quite possible that new customers bring more benefit than has been assumed, because of their greater recommendation rate compared with established customers. It is alarming that, years after the widespread acceptance of relationship marketing, it is still possible to conduct simple studies such as this one, which cast doubt on an important aspect of the retention strategy.

Our evidence on recommendation in relation to tenure has a practical implication for direct marketers who can target communications by duration as a customer. Referrals are sometimes promoted by reward programs (Biyalogorsky, Gerstner and Libai 2001). It seems likely that this form of promotion will be more effective among recently acquired customers since, without incentives, they recommend more than others.

Adoption Studies. Research on the diffusion of innovation has tended to maintain a separate literature from that of service switching. Convergence of these areas has been restrained by an emphasis on social structure in adoption studies (Rogers 1983) but we would argue that the two fields have much in common. Switching is normally seen as a shift of supplier within a category, while new adoptions are often, in effect, a switch in interest from one category to another. Also, many switches within the category may be influenced by a degree of innovation, which is normally a characteristic of adopted categories. Our evidence on the decline of recommendation with tenure suggests that recent adopters would recommend more than longer-term adopters. This helps us to explain short-term fashions or crazes in which an innovation spreads rapidly because, in this context, every adopter is recent and recommendation rates will be high.

FURTHER WORK

This work was exploratory and there is a need for further investigations. We list for attention:

1. Other applications. Does the decline in recommendation with tenure hold for other product fields? We can test this for fashion stores, business services, financial services, car servicing, Internet products, medical services, durables etc. We can also examine the recommendation of new categories. A number of differences between services were cited as possible bases for differential recommendation behavior, e.g. usage frequency, innovation, and personalization.

2. More and better measures. A *relative* measure of attitude should be used. We would expect this to have more relationship with recommendation than an absolute measure. It also seems worthwhile to include a measure of relative *satisfaction* as well as relative attitude. Our view is that satisfaction will have less association with recommendation because satisfaction is a retrospective evaluative assessment relating to personal needs. Recommendations are forward looking and should take more account of the needs of others. Another small change that could be made is to ask for recommendations over the last *six months* rather than a year; this should increase the sensitivity of this measure. Also, we could ask how *many* recommendations were made in six months. We need to include other factors that may be associated with recommendation. Candidates here include *share-of-category loyalty measures* and *weight-of-category spending*. We may also investigate whether recommendations that were made occurred as a response to inquiry or were spontaneous. It seems likely that *sought* recommendations are more influential. Widening the inquiry, we could examine the level of *negative* WOM among users and we could try to find out how many recommendations are converted into referrals.

3. Alternative methods for gathering data. Telephone interviewing stops response format effects but it is prey to low response rate. We do not think that representative sampling is important at the exploratory stage but we favor a method that gives a high response rate, e.g. drop and collect.

4. Wider analysis. It is of interest to know how *attitude changes with tenure*. Several possible ways in which recommendation might rise with tenure were suggested that were based on an increase in evaluation with duration as a customer. If there are no systematic effects we may exclude these explanations. When more than one service is investigated with the same respondents *mavenism* (Feick and Price 1987) could be tested for; this is a generalized tendency to recommend.

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LOYALTY - ATTITUDE, BEHAVIOR, AND GOOD SCIENCE: A THIRD TAKE ON THE NEAL-BRANDT DEBATE

Doug Grisaffe, Walker Information

EDITOR'S NOTE

This article first appeared as a Walker Information white paper. It is reprinted here to increase its availability in the hope of stimulating continuing dialogue on this topic. It is reprinted by permission of Walker Information who copyrighted it in 2001.

In the interest of academic fairness, full discussions from each party represented in this "debate" are available in white paper form on their respective web sites. Grisaffe's paper can be accessed at *www.walkerinfo.com/resources*, then click on "white papers", then click on "Loyalty-Attitude, Behavior, and Good Science...." Brandt's paper can be accessed at *www.burke.com*, then click on "search" and type into the search box "Attitude does matter by D. Randall Brandt". Neal's paper can be accessed at *www.sdrnet.com*, then click on "Analytical Services", then click on "Loyalty Modeling" then click on "A Rebuttal".

DEBATING LOYALTY AND LOYALTY MEASUREMENT

In the June 5, 2000 issue of *Marketing News*, William Neal, respected authority on marketing research says categorically, "Loyalty is a behavior." He says, "If I purchase in a product category 10 times in one year, and I purchase the same brand all 10 times, I am 100% loyal. If I purchase the brand only five out of 10 times, I am 50% loyal." Neal also says it is "ridiculous" to attempt to measure loyalty with three questions – overall satisfaction, recommend intent, and repurchase intent. These three questions, says Neal, will likely correlate at least .80. Measuring intent to recommend and intent to continue in addition to measuring overall satisfaction is tantamount to "measuring the same thing two more times," according to Neal (an expanded discussion can be found on SDR's website).

Naturally these statements cry for rebuttal by Burke, Inc. because Burke uses exactly those three questions in their approach to loyalty research. Replying to Neal in the August 14, 2000 issue of *Marketing News* (with an expanded discussion on Burke's website), D. Randall Brandt, a respected authority himself, states, "we take a position that is strongly opposed to the one offered by Mr. Neal." Unlike Neal's behavior-only view, Brandt states his firm's position - loyalty is "reflected by a combination of attitudes and behaviors." Brandt goes on to defend the three specific items by noting that while correlated, the measures are not redundant. Scoring highly on one does not necessarily mean scoring highly on all. But, says Brandt, scoring highly on all *is* an indication of being a "secure customer." Brandt says the three items can serve as leading indicators of a variety of actual behaviors surrounding loyalty (e.g., repeat purchase, customer retention) once an association has been established empirically.

So we have competing opinions about the nature of loyalty. We also have competing opinions about appropriateness (or lack thereof) of measurement with the three items: satisfaction, recommend and continue. I'm compelled to chime in with a third perspective on some of the points raised by Neal and Brandt. I suggest that (a) previous literature in our field, (b) specification of causal relationships, and (c) scientific principles related to measurement and modeling, can help to shed some light on the debate.

WHAT DOES THE LITERATURE SAY: LOYALTY AS BEHAVIOR ONLY, OR ATTITUDE AND BEHAVIOR?

First, let's consider the nature of loyalty. Is it attitudinal and behavioral as described by Brandt, or is it behavioral only as argued by Neal? As

Brandt has pointed out, the attitude and behavior perspective seems to have prevailed in the literature as early as the 1970s. Indeed in 1969, George S. Day, a pillar in our field, argued that loyalty involved both attitude and behavior. Other early theorists also promoted this view (e.g., Richard Lutz and Paul Winn). The classic text is probably Jacoby and Chestnut (1978), *Brand Loyalty: Measurement and Management*, published by Wiley. In fact that was an exhaustive review of existing literature on the topic of brand loyalty, including Jacoby's own work in the early seventies. Based on that, a well reasoned conceptual definition of loyalty was put forth that included both attitudinal and behavioral components.

It is my opinion that we should not leave behind this rich research tradition and literature. All that work has a natural carry over from the brand context to the customer context. In fact, recent publications have drawn from this attitude-behavior heritage to continue present day theoretical discussions of loyalty (e.g., Dick & Basu 1994; Oliver 1999).

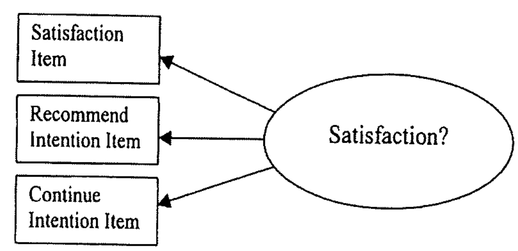
So, in light of past literature, and along with Brandt, I respectfully disagree with Neal's position that loyalty is only about behavior. I add a problematic scenario to the ones pointed out by Brandt to reveal another potential weak spot in the behavior only view. If a buyer has a cognitive rule "buy the lowest priced brand," and brand B is always lowest, the person looks like a loyal customer over time behaviorally. Until brand A enters the market at a lower price. Then the customer switches to show repeat purchase of A, until market prices change again. To which are they truly loyal – the brands or the decision rule? Repeat purchase behavior does not equal true loyalty.

SATISFACTION, RECOMMEND, AND CONTINUE – CORRELATION AND SPECIFICATION

I agree with Brandt that multiple attitudinal and behavioral elements can be used to measure loyalty. However, I respectfully disagree with him about the three particular items used in the Burke index - overall satisfaction, recommend intent, and repurchase intent. I side with Neal who asserts "Those questions do not measure loyalty." So, what do they measure and why are they correlated? On those subjects, I disagree with both Neal and Brandt.

Neal suggests all three may measure *satisfaction.* Pointing to their intercorrelation, he says they "usually are measuring the same thing – satisfaction with the product or service." This implies a reflective measurement model shown in Figure 1 where all three items "reflect" (arrows pointing outward) a single underlying latent construct: customer satisfaction.

Figure 1
Reflective Model Implied by "All Measure Same Thing"



Brandt, while also acknowledging the correlation among the three items, argues that all three work together to capture *loyalty.* Through application of an algorithm, he says Burke uses the pattern on the three items to constitute a degree of loyalty - or in their terminology, a level of customer "security." This view implies a formative measurement model as shown in Figure 2 where all three items work to "form" an index (arrows point inward) capturing an underlying latent construct: customer security/loyalty.

So two specific views have been proposed about what the three items measure, and why they are intercorrelated. But it is interesting to note that by their own words, both Neal and Brandt have pointed to other possible conceptual formulations with the three items. Brandt notes that just because measures correlate does not mean they are redundant: "measures may be correlated for a variety of reasons." And Neal says, "For most people, if they are satisfied with a brand...then they also are highly likely to say they would recommend that brand to others and that they would likely repurchase...." In fact, Neal's statement perfectly frames my opinion about the three items. Satisfaction, recommendation intent and repurchase intent do not measure any single conceptually clean unidimensional construct. They measure three different constructs and are correlated because of an underlying structure of *causal relationships*, shown in Figure 3.

Figure 2
Formative Model Implied by "Pattern of Three Ratings"

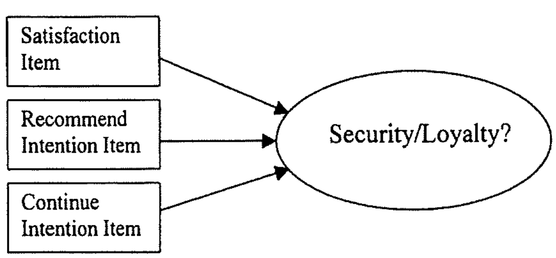
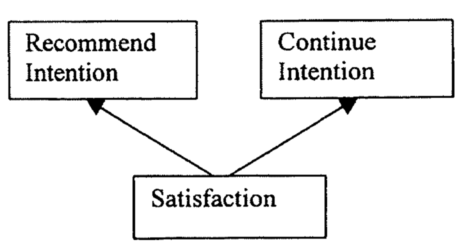


Figure 3
Rival Structural Diagram Accounting for Intercorrelated Measures



The rival structure of Figure 3 certainly will produce observed intercorrelations among the three measures. Further, it is totally consistent with the heart of much early customer satisfaction thinking (i.e., customer satisfaction generally *leads to* desired business outcomes like customer recommendation and intent to purchase again). So where Brandt critiques Neal for not clearly parsing why the three items are correlated, I would say he also needs to go farther to specify the structure of the clear causal relationships among the constructs. Satisfaction, as an indicator of met or exceeded expectations, is one driver of recommend and repurchase intentions. Further, mapping out a path diagram like Figure 3 to explain intercorrelation among the three measures, cannot be considered a definitional road map for loyalty measurement. For that, we must look elsewhere.

GOOD SCIENCE CAN HELP DEBATES ABOUT MEASUREMENT AND MODELING

How do we bring clarity to this debate? I believe we do so through standard, established scientific procedures, as continually applied in publications like Journal of Marketing, and Journal of Marketing Research. There needs to be a reasoned conceptual definition of each distinct construct under scrutiny, valid and reliable measures of those constructs, appropriately specified structural/causal models showing theoretically how the constructs are related, followed by empirical testing of those hypothesized model structures.

In the case of loyalty, drawing from the literature, a reasoned conceptual definition of loyalty should include both attitudinal and behavioral components. In research using survey methodologies, intent to repurchase can tap the *behavioral* component of loyalty. As a behavioral intention, this is distinct from pure attitude and has been argued in attitudinal theories to be a precursor of subsequent behavior. That is not to preclude use of truly behavioral measures however. Actual repeat purchase behavior certainly can be used to capture the behavioral component of loyalty.

Next we need a clear conceptual definition for *attitudinal* loyalty. Again the literature offers a number of directions here. For example, one might use something like psychological attachment to the brand/product/service. After using theory and past research to define attitudinal loyalty, it must be operationalized with appropriate measures. Empirical data on these measures need to demonstrate certain characteristics (internal consistency reliability, convergent and discriminant validity, etc.).

Can intent to recommend and satisfaction together somehow capture this attitudinal part of loyalty? My opinion is that they cannot. Intent to recommend is a behavioral intention, not a measure of attitudinal loyalty. Like repurchase intent, it is a *causal outcome* of favorable attitudes, not a direct measure of them (i.e., I am satisfied therefore I recommend). What about satisfaction – can it tap attitudinal loyalty? Again, I don't think so. Rather than being a measure of attitudinal loyalty, it is a *causal antecedent to* attitudinal loyalty (i.e., I am satisfied therefore I am predisposed to be loyal). In fact, there needs to be explicit recognition that satisfaction is not a direct indicator of attitudinal loyalty. We know some satisfied customers defect. As Neal pointed out, "just because I am highly satisfied with a brand's performance doesn't mean I will necessarily repurchase." Satisfaction may contribute to loyalty, but it is not equivalent to loyalty.

Then, having considered valid conceptual definitions and measures of the attitudinal and behavioral components of loyalty, an appropriate method must be used to combine these into a single construct measurement. Depending upon a chosen theoretical position on how the two components work together, a reflective latent variable, a formative latent variable, or some other means or statistical combination can be used. Bottom line: we need conceptually and empirically valid measurement, and combination, of the attitudinal and behavioral components of loyalty. After that, we can use accepted scientific practices to specify and test things that result from loyalty (e.g., recommendation), and things that contribute to it (e.g., satisfaction, value). This is a classic scientific sequence – attention to valid and reliable construct measurement, then specification and testing of causal antecedents and consequences of that construct.

CLOSING THOUGHTS

Neal and Brandt have raised important issues about the conceptualization and measurement of customer loyalty. Their opposing views about the nature of loyalty and the appropriateness of the three-item approach spark useful debate on a topic of considerable theoretical and applied interest in our time. I have presented an alternative view that I believe avoids some potential points of critique in their positions while leveraging and unifying the strongest points of the two perspectives.

In conclusion then, let's not miss the rich history from which general consensus emerged about conceptualizing loyalty. It involves attitudinal and behavioral components. Then, let's apply the best scientific practices in our field to operationalize and test appropriate definitions with measures and models that withstand rigorous conceptual and empirical investigation. Maybe then we can land on something about which we all can agree.

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REVEALING THE ACTUAL ROLES OF EXPECTATIONS IN CONSUMER SATISFACTION WITH EXPERIENCE AND CREDENCE GOODS

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ABSTRACT

The disconfirmation of expectations model continues to be the dominant model in the study of customer satisfaction notwithstanding its serious conceptual flaws and its weak empirical support. Competing models reveal the two roles that expectations actually play: as a major determinant of the perception of perceived performance of a good, for credence goods, and as the standard of comparison for the determination of satisfaction with information, for both experience and credence goods. A model that uses desires as the standard for determining satisfaction with goods and expectations as the standard for determining satisfaction with information, is shown to generate the most realistic predictions. Some implications for theory and empirical research on consumer satisfaction and complaining behavior are briefly discussed along with some implications for marketing management.

INTRODUCTION

Although various researchers have proposed different standards as the basis of comparison for customers to assess their level of satisfaction with a product/service, the dominant paradigm in the customer satisfaction literature continues to be the disconfirmation of expectations model. This is so even though several researchers have noted serious conceptual problems with the disconfirmation of expectations model (Dixon, Spreng, and Olshavsky 1993; Spreng, MacKenzie, and Olshavsky 1996) and others have found empirical evidence that expectations play only a minor role in the formation of satisfaction judgments (Churchill and Surprenant 1982; Swan and Trawick 1979; Wirtz and Mattila 2001). Spreng et al. (1996) found that desires and expectations both influence overall satisfaction through their effects on satisfaction with goods and satisfaction with information. Their findings suggest that consumers are using both expectations and desires to form satisfaction judgments.

Swan and Trawick (1979) made a conceptual distinction between predictive expectations and desired expectations. Predictive expectation was the consumer's pre-usage estimate of the performance level that the product was anticipated to achieve; i.e., predictive expectation was the expectation term used in the traditional disconfirmation of expectation model of consumer satisfaction (Oliver 1980). Desired expectation was the consumer's pre-usage specification of the level of performance that the consumer wanted from a product. We refer to these desired expectations as desires in this paper to distinguish it from consumer expectations about what they are likely to get from a product.

Swan and Trawick (1979) examined four different scenarios: the effects on overall satisfaction when performance was equal to predictive expectations, less than predictive expectations, equal to desired expectations, and greater than desired expectations. Their empirical findings were contrary to the predictions of the traditional disconfirmation of expectations model, where predictive expectations was considered the comparison standard. In particular, their finding that consumers were indifferent when performance matched predictive expectations but reported high levels of satisfaction when performance matched desired expectations raises questions about expectations being used as the comparison standard by consumers making satisfaction judgments and offers strong support for desires as the appropriate standard in models of consumer satisfaction. However, they conclude that a possible reason they found no effect of expectation on satisfaction was that consumers were very clear about the product performance in their study; i.e., consumers had no ambiguity or difficulty in assessing product performance. They speculated that when product performance was ambiguous (i.e., product claims were not easily verifiable), consumer expectations were likely to influence consumer assessments of product performance (also see Olshavsky and Miller 1972).

We feel there is a lot of merit in the observations made by Swan and Trawick (1979) about how and when expectations might influence consumer satisfaction. In fact, it is very plausible that clarity of product performance may have influenced prior research outcomes where some researchers found expectations to influence satisfaction (e.g., flu shots) and others found no effect of expectations on satisfaction (e.g., fabric cleaner whose performance in removing coffee stains was illustrated by using fabric samples which clearly had the stain removed). Yet, in the twenty one years since the work of Swan and Trawick (1979) there has not been much work examining the effects of expectations and desires on products whose performance is very discernible to the consumer versus products whose performance is difficult to discern.

This paper attempts to explore this issue in a systematic manner by considering the effect of two levels of the "verifiability of claims" (or clarity of product performance) on overall satisfaction for each of three distinct models of satisfaction. Prior research has classified products/services into three classes based on the ease with which consumers can verify the product claims. "Search" goods are those whose claims can be accurately evaluated before purchase. "Experience" goods are those whose claims can be fully evaluated only after product consumption. "Credence" goods are those whose claims differ from the prior two types in that accurate evaluation is beyond the consumer's capabilities (Darby and Karni 1973; Nelson 1974). We will examine only experience and credence goods because of our focus on post-consumption behaviors. Given the existence of large differences in the types of claims typically made on behalf of various goods, it is important to try and understand how consumers form their judgments of the consumption experience when they purchase and use goods with credence characteristics, i.e., goods where it is difficult for them to judge the performance of the good even after repeated uses. A "good" is defined here as a basic product or a basic service plus all associated services.

Consumer Evaluation of Quality of Credence Goods

Prior research (Wilson, Lisle, Kraft, and Wetzel 1989; Hirt 1990) has found that a person's affective expectations can influence his/her affective evaluations of a stimulus and even recalled evaluations of the performance of a stimulus was found to be influenced by prior expectations about the performance of that stimulus. In other words, irrespective of the actual performance of a stimulus, prior expectations about a stimulus' performance could drive the evaluation of a stimulus performance. Though these findings appear to be in line with the predictions based on assimilation effects, Wilson et al.'s (1989) work was unique in empirically demonstrating that *affective* expectations could influence evaluations of a stimulus. The interesting question related to these findings that arises in a consumption context pertains to the conditions under which these effects are likely to occur in consumption contexts. We suggest that evaluation of credence goods is an area where the above effects are likely to be seen. This is because these goods are difficult to evaluate even after they are consumed and hence prior expectations, particularly affective expectations (e.g., I think I will like this product) are likely to influence evaluations.

In this paper, we assume that consumers' assessments of the performance of a credence good will be completely determined by their expectations about the performance of the good. We incorporate this assumption in three different models of consumer satisfaction, namely: Model

1) the disconfirmation of expectations model, Model 2) the desires-as-standard model, and Model 3) an extended desires-as-standard model that incorporates satisfaction with information. First we discuss the process by which consumers are believed to form satisfaction judgments according to these three models of consumer satisfaction. Next, we present some simplifying assumptions concerning the processes by which consumers form satisfaction judgments. Based on these assumptions, for each of the three models, predictions of satisfaction for experience goods and credence goods are generated as a function of expectations, desires, and actual product quality. This systematic exploration of the satisfaction formation process offers interesting and useful insights about the two roles expectations actually play in the determination of overall satisfaction. We conclude that Model 3 is the best model for further research on consumer satisfaction and for guiding marketing decisions.

Model 1: The Disconfirmation of Expectations Model

We begin with the popular disconfirmation of expectations model. According to the disconfirmation of expectations model, satisfaction with a good (**Sg**) is a function of the difference between a good's perceived performance or perceived actual state (**PAS**) and the consumer's pre-purchase expectations (**E**). Following Spreng et al. (1996), we define expectations as *beliefs* about a good's performance at some time in the future. Expectations are determined prior to purchase and are based on information from a variety of sources including the information received from the firm (e.g., advertising, personal selling).

Often, the difference between the perceived actual state and expectations is stated algebraically as (**E-PAS**) because pre-purchase expectations are formed first and the good's performance assessed later. However, we believe it is better to state the comparison as (**PAS-E**) because for most goods when the difference (**PAS-E**)>0, consumer satisfaction is positive and when the difference (**PAS-E**)<0, consumer satisfaction is negative. Spreng et al. (1996) point out however that an exception occurs when consumers have an ideal point on an attribute; e.g., sweetness of a beverage. In these cases, consumers would not be satisfied with either positive or negative differences in (**PAS-E**).

Spreng et al. (1996) also argue that a more accurate conceptualization of the manner in which satisfaction judgments are made involves an assessment of the difference between perceived performance and expectations *followed by* an evaluation of how good or bad that difference is. Hence, they suggest that satisfaction is a *function* of the difference between the perceived actual state and pre-purchase expectations. We adopt Spreng et al.'s (1996) conceptualization and use the following notation to express satisfaction with goods under the disconfirmation of expectations model:

$$S_g = f(\mathbf{PAS\text{-}E})$$

However, the word "function" is not meant to suggest any explicit mathematical formula. Instead, the rules for assigning satisfaction scores for various difference scores are described in a later section headed, simplifying assumptions. These assignment rules are used to generate the satisfaction scores presented in the tables.

Model 2: The Desires-As-Standard Model

The only difference between Model 1 and Model 2 is that for Model 2 the relevant comparison standard is now assumed to be pre-existing desires (**D**). Desires are assumed to be formed in a means-end manner; i.e., desires are derived from higher order goals and from beliefs that specify a functional relationship between goals and sub-goals. For example, antilock brakes on an automobile are believed by many to contribute to the achievement of the higher order goal of safety for one's family. Following Spreng et al. (1996), we define desires as an evaluation of the extent to which goods or benefits/attributes lead to the attainment of higher order goals and use the following notation to express satisfaction with goods under the desires-as-standard model:

$$\mathbf{Sg = f(PAS\text{-}D)}$$

Desires can be very high (optimizers), very low (satisficers), or somewhere between these two extremes (realists). In this paper, we denote these three levels of desires by the following notation: D7 = a very high level of desires, D4 = an intermediate level of desires, and D1 = a very low levels of desires.

To illustrate how level of desires affect satisfaction, we describe a scenario familiar to academics. One encounters many students who desire an A grade in a course, some students who desire a B grade (especially if the course has a reputation of being a difficult course), and a few students who (for various reasons) desire only a C grade. Thus, the desires-as-standard model would predict that receiving a B grade would lead to dissatisfaction for a student with a desire for an A, satisfaction for a student with a desire for a B, and high satisfaction for a student who desires a C. It should be noted that even the student who desires an A may expect a B in a course that they think is likely to be difficult for them. In other words, desires and expectations could easily be very different in this case.

Model 3: The Extended Desires-As-Standard Model

The third and last model is based on the work of Spreng et al. (1996). According to these authors, Models 1 & 2 are incomplete representations of consumer satisfaction because they omit the very important role that satisfaction with information (**Si**) may play in determining a consumer's *overall satisfaction* (**So**) with the consumption experience. For example, a consumer may be very satisfied with a good (e.g., meal in a restaurant) but very dissatisfied with the information received about the good from a salesperson (e.g., information about the meal's ingredients from the waiter) or from some other source (e.g., friends, family) prior to the purchase. Hence, in this example, overall satisfaction will be less than satisfaction with the good because overall satisfaction is determined by *both* satisfaction with the good and satisfaction with the information. Thus, for Model 3, we use the following notation to express consumers' overall satisfaction, **So**:

$$\mathbf{So = W1{*}Sg + W2{*}Si,}$$

where **W1** and **W2** are the relative weights assumed to be implicitly assigned by a consumer to satisfaction with goods, **Sg,** and satisfaction with information, **Si**, respectively, as they assess their overall satisfaction. These weights are assumed to vary across consumers, across different shopping contexts, and across repeated consumption experiences. For our predictions in Tables 5 and 6, it is assumed that W1=0.75 and that W2=0.25.

It is further assumed that satisfaction with information is determined by the difference between the perceived actual state and expectations; i.e., S_i = **f(PAS -E)**. This is because prior to actually experiencing the product, expectations about a product are likely to be based on the information received about the product. In the case of credence goods, we expect satisfaction with information to be always positive because on the basis of our earlier discussion about how consumers assess the quality of credence goods, we believe that for credence goods the perceived actual state is completely determined by expectations (**PAS=E**). For example, consumers cannot easily judge the performance of a flu shot (a credence good). Hence, a consumer who was told by his/her physician that a flu shot is very good at decreasing the odds of getting a bad case of the flu is likely to perceive the performance of the flu shot as very good. Similarly, a consumer who was told by his/her physician that a flu shot cannot do much to decrease the odds of getting a bad case of the flu is likely to perceive the performance of the flu shot as not very good. In both of these examples, **PAS=E**.

For experience goods, the "perceived actual state" (**PAS**) is determined entirely by the actual state (**AS**); i.e., since the consumer can accurately judge the performance of the good, **PAS** = **AS**. Here, the "actual state" (**AS**) of a firm's goods is synonymous with product quality or service quality. **E** will be determined by the information received prior to purchase. Hence, satisfaction with information will depend upon the judged significance of the difference between **PAS** and **E**. A more precise description of the impact of these perceived difference scores on satisfaction with information will be presented in Tables 5 and 6.

Simplifying Assumptions

To generate "tables" that allow us to better describe how each of these three models predicts consumers' overall satisfaction with experience goods and with credence goods as a function of expectations, desires, and actual state, the following additional "simplifying assumptions" or assignment rules are presented. It is to be noted that these assumptions could easily be studied in future research to test their plausibility and to explore the robustness of each of the models to deviations from these assumptions.

1) So is overall satisfaction. Sg is satisfaction with goods and Si is satisfaction with information. In Models 1 and 2, Sg is the same as So. In Model 3, So is a weighted sum of Sg and Si.

2) Satisfaction is measured on a scale ranging from -3 to +3 where -3 is extremely dissatisfied and +3 is extremely satisfied. The midpoint (0) on this scale indicates that the consumer is neither satisfied nor dissatisfied; i.e., the consumer is indifferent to the outcome. The midpoint of satisfaction is never used in tables we present here.

3) The "**f**" or "function" aspect of the equations for Models 1, 2, and 3 implies the following assignments between the difference scores and the satisfaction scores for all three types of satisfaction – goods, information, and overall:

a) Satisfaction is assigned a value of +1 when **PAS=E** or **PAS =D**; e.g., in Table 1 when PAS-E = 0. Satisfaction is assigned a value of +2 when **PAS - E** = +3 or **PAS - D** = **+3**. Similarly, when **PAS - E** = +6 or **PAS - D** = **+6**, a value of +3 is assigned to satisfaction.

b) Satisfaction is assigned a value of -2 when **PAS - E** = -3 or **PAS - D** = **-3**. A value of -3 is assigned to satisfaction when **PAS - E** = -6 or **PAS - D** = **-6.** (Note that in the Tables shown below PAS - E takes on only five distinct values: 0, +3, +6, -3, and -6 and the satisfaction values corresponding to these difference scores are +1, +2, +3, -2, and -3, respectively).

4) Expectations are determined prior to purchase and may be based on information from a variety of sources or expectations may be based entirely on the information received from the firm (e.g., advertising, personal selling).

5) The "actual state" (**AS**) of a firm's goods is synonymous with the product quality or service quality.

6) For experience goods, the "perceived actual state" (**PAS**) is determined entirely by the actual state (**AS**); i.e., since the consumer can accurately judge the quality of the consumption experience, **PAS** = **AS**.

7) For credence goods, the **PAS** is determined by pre-existing expectations based on information received from the firm and from other sources (e.g., friends). Here we assume that for most credence goods, **PAS** = **E**.

Based on these assumptions, we can explore what happens to the value of overall satisfaction as the actual state of the product or service varies from low to high for experience and credence goods. Tables 1 and 2 examine the predictions made by the disconfirmation-of-expectations model (Model 1), Tables 3 and 4 examine the predictions made by the desires-as-standard model

(Model 2), and Tables 5 and 6 examine the predictions made by the extended desires-as-standards model (Model 3). These tables are for illustrative purposes and they show very clearly how different combinations of desires, expectations, and actual state influence consumers' satisfaction with experience and credence goods by three different models. We will describe in detail how the numbers in Table 1 were generated and then briefly describe how the other Tables differ from Table 1.

Predictions Based on Model 1

Table 1 shows consumers who may be at three different levels of expectations (E1 - low expectations, E4 - moderate expectations, and E7 - high expectations). As it is assumed that desires can exist independently of expectations, Table 1 clearly shows that at any given level of expectation, a consumer could be at any of three levels of desires, e.g., a consumer with low expectations (E1) could have low desires (D1), moderate desires (D4) or high desires (D7). For experience goods, it is believed that consumers can assess the quality of the good after they experience or try the product. Column 2 of Table 1 shows that for low quality goods, consumers correctly assess PAS=1 (low quality) and column 5 shows that for high quality goods, they correctly assess PAS=7 (high quality). In columns 3 and 6, one can see the result of consumers comparing their perceptions of actual state of the product with their expectations, i.e., PAS-E. Hence, for low quality goods, we find that PAS-E=0 when consumer expectations are low and if we go down column 3, we find PAS-E= -6 when consumer expectations are high. It should be noted that for a given level of quality and expectations, the critical comparison that determines satisfaction, PAS-E, is always the same, irrespective of the level of desires (that is an important difference between Model 1 and Model 2). For high quality goods, in column 5, we find that PAS-E=6 when consumer expectations are low and PAS-E= 0 when consumer expectations are high. Finally, columns 4 and columns 7 show the satisfaction (**Sg**) assignments (using the simplifying assumptions) for low and high quality experience goods made by the disconfirmation-of-expectations model. For low quality goods when expectations are low, perceived product performance matches consumer expectations (PAS=E) and so consumers are satisfied with the good at the +1 level. For high quality products when expectations are low, perceived product performance considerably exceeds expectations and consumers are extremely satisfied with the good at level +3.

The main difference between Table 2 and Table 1 lies in the way the numbers in columns 2 and 5 are obtained. For credence goods, it is assumed that the perceived performance of the good is completely determined by consumers' prior expectations (as in the flu shot example mentioned earlier) and so the numbers in columns 2 and 5 are always equal to the expectation levels. Thus, PAS=1, when E=1 and this is true irrespective of the actual quality of the credence good. Columns 3 and 6 in Table 2 are derived in the same manner as in Table 1, i.e., PAS-E. As the numbers in the PAS column are equal to the expectations level, the PAS-E column will always have a zero for all credence goods. The impact of this is noticed in columns 4 and 7 where it is shown that the disconfirmation of expectations model predicts that consumers will always be satisfied with credence goods, irrespective of the level of desires, the level of actual product quality, and the level of expectations. This suggests that Model 1 makes predictions that are unrealistic and we discuss this issue later in the paper.

With respect to Table 2, it is important to stress that we assumed that the perceived actual state was determined entirely by pre-existing expectations (i.e., **PAS = E**). We recognize that under certain conditions consumers may *believe* that the information received from other consumers about the performance of a credence good is valid (even though, by definition, other consumers cannot judge a credence good's performance either). Hence, **PAS** may be greater than or less than expectations and our predictions

Table 1
For Experience Goods

		Low Quality (1)			High quality (7)	
	PAS	PAS-E	Sg=f(PAS - E)	PAS	PAS-E	Sg=f(PAS - E)
Low E (1) D1	1	0	1	7	6	3
D4	1	0	1	7	6	3
D7	1	0	1	7	6	3
Med E (4) D1	1	-3	-2	7	3	2
D4	1	-3	-2	7	3	2
D7	1	-3	-2	7	3	2
High E (7) D1	1	-6	-3	7	0	1
D4	1	-6	-3	7	0	1
D7	1	-6	-3	7	0	1

Table 2
For Credence Goods

		Low Quality (1)			High quality (7)	
	PAS	PAS-E	Sg=f(PAS - E)	PAS	PAS-E	Sg=f(PAS -E)
Low E (1) D1	1	0	1	1	0	1
D4	1	0	1	1	0	1
D7	1	0	1	1	0	1
Med E (4) D1	4	0	1	4	0	1
D4	4	0	1	4	0	1
D7	4	0	1	4	0	1
High E (7) D1	7	0	1	7	0	1
D4	7	0	1	7	0	1
D7	7	0	1	7	0	1

for So would change accordingly.

Predictions Based on Model 2

The entries in Tables 3 and 4 are derived the same way as in Tables 1 and 2 with the main difference being that columns 3 and 6 show the difference between perceived actual state and consumer desires (PAS-D) and not (PAS-E) as in Tables 1 and 2. Thus, in Table 3, column 3 shows that for a consumer with low expectations, PAS-D could vary from 0 to -6 for a low quality product because a person with low expectations may have desires that vary from low to high. These values

Table 3
For Experience Goods

		Low Quality (1)			High quality (7)	
	PAS	PAS-D	Sg=f(PAS - D)	PAS	PAS-D	Sg=f(PAS - D)
E1 D1	1	0	1	7	6	3
D4	1	-3	-2	7	3	2
D7	1	-6	-3	7	0	1
E4 D1	1	0	1	7	6	3
D4	1	-3	-2	7	3	2
D7	1	-6	-3	7	0	1
E7 D1	1	0	1	7	6	3
D4	1	-3	-2	7	3	2
D7	1	-6	-3	7	0	1

Table 4
For Credence Goods

		Low Quality (1)			High quality (7)	
	PAS	PAS-D	Sg=f(PAS - D)	PAS	PAS-D	Sg=f(PAS - D)
E1 D1	1	0	1	1	0	1
D4	1	-3	-2	1	-3	-2
D7	1	-6	-3	1	-6	-3
E4 D1	4	3	2	4	3	2
D4	4	0	1	4	0	1
D7	4	-3	-2	4	-3	-2
E7 D1	7	6	3	7	6	3
D4	7	3	2	7	3	2
D7	7	0	1	7	0	1

in column 3 are in sharp contrast to Table 1 where column 3 was a constant for a given level of expectations. The level of satisfaction shown in column 4 is a direct result of the numbers derived in column 3; i.e., when PAS-D=0, Sg=1; when PAS-D= -3, Sg= -2; and when PAS-D= -6, Sg= -3. Using the assignment rules presented in the simplifying assumptions, one can easily derive the numbers for high quality experience goods shown in columns 6 and 7. Again, it is important to note that for credence goods we are assuming that **PAS = E**.

Table 5
For Experience Goods

		Low Quality				High quality			
		PAS	Sg	Si	So	PAS	Sg	Si	So
E1	D1	1	1	1	1.00	7	3	3	3.00
	D4	1	-2	1	-1.25	7	2	3	2.25
	D7	1	-3	1	-2.00	7	1	3	1.50
E4	D1	1	1	-2	0.25	7	3	2	2.75
	D4	1	-2	-2	-2.00	7	2	2	2.00
	D7	1	-3	-2	-2.75	7	1	2	1.25
E7	D1	1	1	-3	0.00	7	3	1	2.50
	D4	1	-2	-3	-2.25	7	2	1	1.75
	D7	1	-3	-3	-3.00	7	1	1	1.00

Table 6
For Credence Goods

		Low Quality				High quality			
		PAS	Sg	Si	So	PAS	Sg	Si	So
E1	D1	1	1	1	1.00	1	1	1	1.00
	D4	1	-2	1	-1.25	1	-2	1	-1.25
	D7	1	-3	1	-2.00	1	-3	1	-2.00
E4	D1	4	2	1	1.75	4	2	1	1.75
	D4	4	1	1	1.00	4	1	1	1.00
	D7	4	-2	1	-1.25	4	-2	1	-1.25
E7	D1	7	3	1	2.50	7	3	1	2.50
	D4	7	2	1	1.75	7	2	1	1.75
	D7	7	1	1	1.00	7	1	1	1.00

Predictions Based on Model 3

Tables 5 and 6 are slightly different from Tables 3 and 4. First, we have eliminated the column PAS-D to simplify the table. However, it should be noted that Sg, satisfaction with good, is still determined by PAS-D using the simplifying assumptions. For example, in Table 5, it is shown that consumers with high level of desires will have extreme dissatisfaction (Sg= -3) when product quality is low. This value of Sg is based on the fact that PAS-D (i.e., 1 - 7) equals -6 and by our simplifying assumptions, Sg= -3 when PAS-D= -6.

The other difference between Tables 5 and 6 and the Tables 3 and 4 is that in Tables 5 and 6, we have introduced two new columns called Si and So which represent satisfaction with information and overall satisfaction, respectively. The numbers in column Si are based on the value of the difference PAS-E. To illustrate, when consumers with low expectations experience a product that has low quality, they are satisfied with the information they received about the product, irrespective of the level of their desires, PAS = E, Si = +1. However, if the quality is very low and their desires are very high, they will be extremely dissatisfied with the good even if their expectations are low (see Table 5, column 3, value of Sg corresponding to E1 and D7). And note that in this condition, Si = +1 because PAS = E.

The values of So in columns 5 and 6 for Tables 5 and 6 are calculated using the formula stated previously for Model 3. For instance, for Table 5, in the low quality, E1, D1 condition, So = .75 (1) + (.25) 1 = +1.

DISCUSSION

Some Implications for Theory

The three models discussed above and the tables generated on the basis of these models provide a theoretical extension to the work of Swan and Trawick (1979). They made a conceptual distinction between predictive expectations and desires and found that meeting or exceeding desires resulted in high levels of satisfaction. Although their results suggested that desires as a comparison standard was better than the traditional expectations-as- standard model in predicting consumer satisfaction, they felt that when product performance was ambiguous, expectations could influence perceived performance and hence influence satisfaction. However, they did not speculate on the relative efficacy of the disconfirmation of expectations model versus the desires as standard model.

We stated the main assumptions of three different models and used each of these models to predict overall satisfaction with experience goods and credence goods. The results shown in Tables 1 to 6 are interesting and can offer practical insights for academics and managers about the relative efficacy of the models in predicting overall satisfaction. Although Swan and Trawick (1979) did not examine credence goods and they did not specify levels of predicted satisfaction numerically in their Table 1 (where they predict satisfaction/dissatisfaction for different combinations of desires, expectations and performance), the predicted satisfaction for experience goods and credence goods in our study using the desires as standard model corresponded perfectly with the predicted satisfaction in their Table 1. For example, in our Table 3, the cell corresponding to E4, D1 and low quality product corresponds to their cell where predicted expectations are greater than desires and performance is equal to desires. Based on the assumptions of Model 2, we calculated overall satisfaction in this cell to be 1 which matched their prediction that this cell would have satisfied consumers. The interesting finding is that Swan and Trawick's (1979) predictions held true for credence goods, too. For example, in Table 4, the cell E1, D7, low quality product corresponded to their cell where predicted expectations are less than desires and performance is equal to expectations. Based on the assumptions of Model 2, we calculated satisfaction in this cell to be -3 which matched their prediction that this cell would have dissatisfied consumers.

Similarly, we find from Tables 5 and 6 that predictions of Model 3, the extended desires as standard model, which had satisfaction with information included as a component contributing to overall satisfaction, also corresponded well with the empirical evidence from Swan and Trawick's (1979) study. In fact, the results in Tables 5 and 6 follow the same pattern as the results in Tables 3 and 4; i.e., there is a good match between the predictions of satisfaction/dissatisfaction for all the cells under the two models. However, it should be pointed out that this match may be a function of the weights we chose for satisfaction with goods and satisfaction with information (W1=0.75 and

W2=0.25). If we decrease the weight for satisfaction with good to 0.25 and increase the weight for satisfaction with information to 0.75, we could expect results that differ considerably from the predictions of the desires as standard model that does not include satisfaction with information. In contrast, we find from Table 1 that the disconfirmation of expectation model would make erroneous predictions for three of the six cells for which we have empirical evidence from Swan and Trawick's (1979) study using an experience good.

For credence goods, though we don't have empirical evidence to compare the relative efficacy of the different models, the predictions based on the disconfirmation of expectation model seem a bit unrealistic; i.e., irrespective of expectations, desires, and product quality, consumers will always have the same low level of satisfaction with the product or service. If this were true, there would be no way for marketers to influence consumers' overall satisfaction with a product/service based on product performance, expectations and desires. It would seem more realistic that even if consumers can't assess product performance accurately, their satisfaction with the good would vary as a function of the interaction among expectations, desires, and actual performance as predicted by the desires as standard model.

It is important to note that the dichotomy proposed in the form of "experience" goods vs. "credence" goods is perhaps better viewed as extreme points on a continuum. In reality most goods are comprised of multiple benefits/attributes and some of these benefits/attributes and the claims made on behalf of some of these benefits/attributes may be verifiable while others may not be verifiable. Further, even for certain types of experience goods, we expect differences among consumers in their ability to verify claims. Some of these differences among consumers may be sensory in nature (e.g., the ability or inability to detect differences in the taste of similar brands of foods or beverages) while some of these differences may be cognitive in nature (e.g., the knowledge or skills required to judge the quality of computer software, artwork, furniture, or rugs). Hence, we expect these complications to continue to create difficulties interpreting the results of past and future studies of consumer satisfaction/dissatisfaction. Clearly, empirical tests of our predictions, even though greatly simplified, must be conducted before we can draw really firm conclusions.

Based on the models we present here and the empirical support provided by Swan and Trawick's (1979) research, we believe that Model 1 (the disconfirmation of expectations model) has serious deficiencies, both conceptual and empirical. However, as demonstrated in Models 2 and 3, expectations are an important determinant of satisfaction for goods that have one or more salient credence benefits/attributes and for experience goods being evaluated by consumers who do not have the necessary ability to evaluate them. Specifically, expectations play at least two important roles in the determination of overall satisfaction: 1) as a potentially powerful determinant of the perceived actual state for credence goods and for experience goods for some consumers, and 2) as the standard of comparison for satisfaction with information for both experience and credence goods. (The empirical support found in past studies for expectations as the standard may be attributed to one or both of these roles.)

Finally, we believe that Model 3 (especially with additional assumptions about the role of attributions and appraisals) may have some important implications for furthering our understanding of complaining behavior. Prior research has shown that differences in the attributions consumers make about the causes for product failure can lead to different kinds of behavior (Folkes 1984) and attributions have been shown to be the antecedents of cognitive appraisals which in turn result in various kinds of emotions (Smith et al. 1993; Kumar and Olshavsky 1996). Thus, it is very likely that different attributions about product performance and product information will lead to different appraisals of a consumption experience which in turn would result in differences in the emotions evoked in the consumer and also in his/her level of satisfaction with the good and satisfaction with the information. Hence, we would argue that one implication of Model 3 (or a slight variation of Model 3) would be that the different combinations of satisfaction with good and satisfaction with information could result in quite different types of complaining behavior. To illustrate, a 2 X 2 table can be formed with high and low levels of Sg and high and low levels of Si. For each of the four resulting cells, differential predictions can be made concerning the types of complaining behavior that are most likely to occur. Consumers who are very dissatisfied with the good *and* very dissatisfied with the information, can be expected to react very differently from those who are very dissatisfied with the good, but very satisfied with the information. Similarly, consumers who are dissatisfied with the information and believe that a salesperson lied to them to increase his/her own profit are likely to engage in more active forms of complaining behavior (e.g., seek the manager out and accuse the firm of deception) than consumers who are dissatisfied with the information and believe that salesperson's inexperience (e.g., young salesperson who informs you that it is his/her first day on the job) was responsible for the inaccurate information they received.

In conclusion, we believe that Model 3 offers researchers the best basis for future studies of consumer satisfaction. We believe greater empirical testing of Model 3 will be helpful in assessing its efficacy for predicting consumer satisfaction and also for understanding consumers' responses to dissatisfaction.

Some Marketing Management Implications

The three models differ greatly in terms of their implications for marketers. To get some practical insights into how marketers of credence goods can influence consumers' overall satisfaction, we examine, using each of the three models, the effects of increasing consumer expectations and product performance on overall satisfaction. We chose expectations and performance as these are more under the direct influence of a manager's actions; i.e., marketing communications can influence expectations while a firm has the choice of making high or low quality products/services.

For experience goods, Model 1, the disconfirmation of expectations model, predicts that as expectations increase, satisfaction with the good decreases because the difference between perceived performance and expectations becomes increasingly less favorable (see Table 1). This difference increases because consumers can accurately assess the performance of an experience good and this assessment of performance is assumed to be independent of the level of expectations. Thus for a given level of product quality, an increase in consumer expectations about the good's performance will lead to lower levels of satisfaction. For experience goods, desires are not part of the Model 1.

For experience goods, Model 2, the desires as standard model, predicts that as consumer expectations increase, satisfaction is not affected because the difference between perceived performance and desires does not change as expectations increase (see Table 3). For experience goods, expectations are assumed to play no role in Model 2. Because consumers can assess performance accurately, satisfaction is solely a function of the difference between perceived performance and desires. In Model 2, expectations and desires are assumed to be independent of each. (It is recognized that consumers' desires may be influenced by a firm's promotions but this has not been incorporated in this version of Model 2 in order to simplify presentation of our more basic points.) Therefore, for experience goods both Model 1 and Model 2 imply that marketers of experience goods cannot be successful only by allocating resources to increase consumer expectations without doing something to increase product quality. However, the two models differ in their implications for credence goods.

For credence goods, consumers cannot determine the quality of the goods and their perceptions of performance are determined entirely by their expectations; e.g., most buyers of precious stones cannot accurately judge the quality of these stones and their decision to buy from a known, reputable jeweler versus a discount store is driven by their belief that the goods sold by the known jeweler is likely to be of higher quality than similar looking goods sold at the discount store. Hence, for credence goods, perceptions of performance and expectations are always equal, at all levels of expectations (see Table 2). This is true for both low and high quality credence goods. Model 1 predicts that as expectations increase, satisfaction does not change because the difference between perceived performance and expectations always remains constant for credence goods. Model 2 predicts that as expectations increase, satisfaction increases because the difference between the perceived actual state and desires becomes larger and therefore increasingly more favorable. This difference increases because perceived performance is assumed to be determined by expectations (see Table 4). This is true for both low and high quality credence goods. Model 2 therefore implies that marketers of credence goods should allocate resources to attempt to increase consumer expectations. Although this fact is known to most casual observers of the marketing practices of firms, Model 2 offers a simple explanation of when such practices will influence consumer satisfaction and when they will not. We hasten to add however that Model 2 makes clear that marketers of credence goods that have achieved high levels of consumer satisfaction merely by forming high expectations are on very shaky ground (e.g., a product-testing organization using sophisticated laboratory techniques may one day reveal the actual level of product quality, as happened when Consumers Union reported on the relative purity of various brands of bottled water vs. tap water).

Model 3 has implications for marketers that are similar to Model 2. However, Model 3 has the additional implication that overall satisfaction is determined by both satisfaction with the good and satisfaction with the information. Hence, the level of satisfaction or dissatisfaction with the overall consumption experience (which should be of most interest to marketers) can be increased or decreased depending upon the consumer's satisfaction with the information about the good received prior to the purchase. While information about goods can and does come from many sources (e.g., friends, product-testing organizations, packaging), one very important source takes the form of the various promotions (e.g., advertising, sales promotions, personal selling, public relations, the firm's website, direct marketing) undertaken by the firm. It therefore behooves marketers to carefully monitor and control the impact of all of their promotional efforts on consumer's satisfaction with information as well as on satisfaction with the good.

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CONSUMER COMPLAINTS AND THIRD PARTIES: DETERMINANTS OF CONSUMER SATISFACTION WITH COMPLAINT RESOLUTION EFFORTS

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ABSTRACT

This paper explores consumers' satisfaction with the complaint process, using a data set of financial service complaints lodged with a federal agency acting as a third party complaint mechanism. Contrary to previous studies, we find that 60 percent of consumers were satisfied with the complaint resolution process and of these, over half were very satisfied. Having the problem resolved in their favor, complaining directly (versus being referred), having higher levels of education, using other third parties, being willing to use the service again, and feeling that the service was responsive were associated with being very satisfied with the complaint process.

INTRODUCTION

The typical advice offered to a consumer with a complaint is to first go to the seller or merchant, or to the manufacturer/provider of the good or service. If the complaint is not resolved between the consumer and the seller, the next step may be to go to a third party. In the United States, these third parties can include private or not-for-profit groups such as trade associations and industry-based consumer action panels as well as government agencies at the local, county, state, or federal level.

There is some evidence that consumers are less likely to complain to third parties (see, for example, Kolodinsky, 1993 and Tipper, 1997). The costs, in terms of time and effort to involve a third party when resolving a complaint, are higher for consumers. In fact, consumers may not even know who the appropriate third party is in a given complaint situation. For example, when complaining about a financial service, should consumers go to their state's Attorney General, to their state's banking department, or to a federal banking regulator? The implication is that consumers who use third-party complaint mechanisms may be more tenacious and resourceful, and their problems may be more severe or complicated.

Given that it may require greater effort for a consumer to involve a third party in the complaining process, the question arises as to how satisfied consumers are with the results of these third parties. Oliver (1997) referred to this as secondary satisfaction -- that is, satisfaction with the complaining process. The purpose of this paper is to explore factors associated with consumer satisfaction with third-party complaint handling. Specifically, we explore complaints in the financial services sector where the third party is a U.S. federal agency.

BACKGROUND ON THE FEDERAL RESERVE COMPLAINT PROGRAM

The Federal Reserve System (the "System") is mandated by federal law to investigate and resolve complaints lodged by consumers against state-member banks (that is, state-chartered banks that are members of the Federal Reserve System). Over the last five years, the number of consumer complaints against state member banks nearly doubled, from 1221 in 1996 to 2408 in 2000 (a 12 percent growth rate per year). During this period, the proportion of complaints about state member banks rose slightly relative to all complaints received, from 41.6 percent to 48.6 percent (see Table 1). In addition, the System receives about 2000 other inquiries and requests for information and materials annually.

Each year, the numbers and types of

Table 1
Top Complaints Received about State Member Banks by Product Category, 1996 to 2000

Major Category	1996	1997	1998	1999	2000
Credit Cards	34.7%	42.3%	55.4%	51.4%	41.4%
Checking Accounts	14.2%	11.2%	9.8%	11.2%	17.4%
Real Estate Loans	7.7%	5.4%	5.1%	6.9%	7.2%
Loan Functions	2.9%	3.2%	3.2%	2.0%	2.1%
General Functions	2.2%	2.7%	1.7%	1.6%	2.0%
Installment Loans	7.4%	4.9%	4.6%	4.8%	4.2%
Deposit Functions	4.1%	4.6%	3.5%	2.3%	3.4%
Certificates of Deposit	2.5%	2.6%	2.5%	3.7%	4.0%
Electronic Funds Transfer	2.9%	3.3%	1.6%	1.6%	2.1%
Regular Savings Accounts	3.0%	3.4%	1.7%	2.3%	2.7%
IRA/KEOGH Accounts	-	-	-	-	2.1%
Bonds	2.1%	-	1.6%	-	-
Business/Agri. Loans	2.5%	-	-	-	-
Total complaints against state member banks	1221	1513	1638	1977	2408
Total complaints against all institutions	2935	3352	3884	4693	4951
State member bank complaints as a proportion of all complaints	41.6%	54.1%	42.2%	42.1%	48.6%

complaints received are collected and analyzed, and trend reports that summarize complaint activity are produced. Credit cards garner the most complaints; this has been the case for years. In 2000, checking account complaints held the number two spot, and the number three slot involved real estate loans. See Table 1, which shows the top complaint categories for 1996–2000.

Complaints can be lodged with the System at its central headquarters (the Board of Governors), or with any of the twelve Federal Reserve Banks located throughout the country. Complaints are received by mail as well as by telephone. Five of the Reserve Banks have 800-numbers that consumers can use to contact the System. The System has begun to receive complaints electronically; three Reserve Banks have on-line sites for consumers to register complaints.

Once a complaint is received, it is acknowledged and investigated. By federal regulation, complaints must be acknowledged or resolved within 15 business days. Complaints received by the Board about state-member banks are referred to the Reserve Banks for investigation. The policies and procedures for the investigation and resolution of complaints are compiled in the System's *Consumer Complaint Manual* to ensure that complaints are being handled in a timely, thorough and uniform way. After a complaint is resolved, the complainant is contacted by letter and asked to complete a consumer satisfaction questionnaire.

The Federal Reserve also has a formal referral program. When the Board or a Reserve Bank receives a written complaint against an entity regulated by another agency, it forwards the complaint to the proper agency and notifies the complainant of the referral. In the case of telephone complaints, the complainant is directed to the proper agency. In turn, other agencies refer complaints about Federal Reserve System state member banks to the Board.

Complaint Analysis Evaluation System and Reports

Data about consumer complaints and information requests are entered into an on-line system that can be accessed by both Board and Reserve Bank personnel. That system--the Complaint Analysis Evaluation System and Reports or CAESAR--has been functional since 1999, although data are available electronically from the early 1990s and other data archives go back to the 1980s. CAESAR provides System personnel with a great deal of detailed and summary information. This information includes, for example, data about the number and types of complaints and inquires received.

Each complaint and request for information is coded into CAESAR using an extensive master list of 34 product codes (for example, credit cards, checking accounts) and 311 problem codes (for example, billing error, interest rates, and fees). Coding is done both at the Board and at the Reserve Banks depending upon where the complaint is lodged. The list of codes has been developed over many years of dealing with thousands of consumer complaints. Consequently, the coding system is quite robust. As new products and services come to market, or as new concerns such as predatory lending, privacy and identity theft develop in the marketplace, new codes are added to CAESAR. This allows the Federal Reserve to keep abreast of developing trends, to respond to congressional requests for information about products or practices of concern in the financial services area, and to monitor financial institutions as needed.

Marketing and Outreach Efforts

The System conducts little marketing when it comes to publicizing its complaint investigation responsibilities and procedures. The Board, however, does have a consumer education brochure and website information on "How to File a Consumer Complaint About a Bank," in both English and Spanish, explaining the System's complaint-handling duties, how and where complaints can be filed, what kinds of complaints are investigated, and how consumers can expect to have their complaints handled. The information also includes descriptions of the consumer financial services laws that fall within the System's jurisdiction to investigate, and lists the names and addresses of the other federal agencies that handle financial services complaints, as well as the types of institutions over which they have jurisdiction. Most consumer brochures produced by the Board provide contact information, including the Board's address and website, along with the phone number for the Consumer Complaints section.

At this point, the Board does not have an 800 number in place at its central office for consumers to use to lodge complaints or inquiries, nor does the Board have a way for consumers to file a complaint on the Internet. It is likely that easier consumer access (via an 800 number and the Internet) as well as increased marketing efforts will increase complaint volume. The Board will be watching to see how the 800 numbers and the ability to complain on-line at some of the Reserve Banks affect the numbers of complaints and inquiries lodged and the levels of service provided (for example, response time, quality of responses, etc.).

Complaint Trends

There has been a significant growth since 1996 in the total number of complaints received—that is, state-member bank complaints and complaints against other financial institutions. In 1996 the System (including the Board) received 2935 complaints for all institutions (state member banks and other financial institutions); in 2000 the number was 4951 (see Table 2).

Only two Reserve Banks, Richmond and Atlanta, handled nearly three out of five complaints in 2000. This very skewed distribution relates not to the geographic distribution of consumers but to the geographic, distribution of the banks that are the target of the

Table 2
System Wide Summary: State Member Bank Complaints Received by District Reserve Banks and Board, 1996 to 2000

Reserve Bank District	1996	1997	1998	1999	2000
Boston	26	20	10	15	9
New York	380	453	289	334	421
Philadelphia	12	10	13	26	20
Cleveland	69	65	69	99	126
Richmond	362	558	823	919	842
Atlanta	67	71	82	150	570
Chicago	136	157	110	132	148
St. Louis	13	17	33	27	28
Minneapolis	25	94	137	184	169
Kansas City	19	18	28	24	28
Dallas	8	9	19	10	6
San Francisco	93	37	25	31	33
Board*	8	4	0	26	8
Total State Member Bank Complaints	1221	1513	1638	1977	2408

*Includes only complaints handled by the Board; other complaints received about state member banks are referred to the appropriate District Federal Reserve Bank

complaints. Nine out of ten complaints against state member banks in 2000 were handled by five Reserve Banks (New York, Richmond, Atlanta, Chicago, and Minneapolis), with some significant growth concentrated in a few Reserve Banks. The Minneapolis Federal Reserve Bank, for example, has seen its complaint volume jump from 25 state-member bank complaints in 1996 to 169 in 2000; the Atlanta Reserve Bank's complaint volume increased from 67 complaints in 1996 to 570 in 2000. The Richmond Reserve Bank, on the other hand, has always had a high volume of complaints, but it too has experienced significant growth in the last five-year period: from 362 complaints in 1996 to 842 complaints in 2000. The Chicago Federal Reserve Bank received a total of 258 complaints in 1996; their complaint numbers jumped to 465 in 2000. The Dallas Federal Reserve Bank complaint volume increased from 44 complaints in 1996 to 99 in 2000. At the Board 665 complaints were received in 1996; by 2000 the number was up to 1624.

These numbers may not seem particularly high. But the Federal Reserve has a policy of individually investigating every complaint received and responding in writing to the consumer about its investigation findings and the complaint's resolution. This is not the case with all federal agencies, and may not be the case with some state agencies. Overall, the complaint business is a growth industry at the Federal Reserve, and growing pains are being felt as efforts are made to maintain high standards for investigation, timeliness and thoroughness.

PREVIOUS WORK IN THIRD PARTY COMPLAINTS

Early research on consumer complaining behaviors focused on exploring the determinants of who complains and who does not (Mason and Himes, 1973; Warland et al, 1975; Best and Andreasen, 1977, Pfaff and Blivice, 1977; see also overviews in Andreasen, 1988 and Singh, 1990). Most research on the typologies of consumer responses starts with Hirschman's seminal work in

1970, in which he outlined exit, voice and loyalty as the three response options open to consumers experiencing dissatisfaction. Others built upon this work, adding the concepts of public versus private action and voicing to sellers versus voicing to third parties (Best and Andreasen, 1977; Richins, 1987; Singh, 1990; Kolodinsky, 1995; Lee and Soberon-Ferrer, 1996).

More specifically, consumers who complain to third parties tend to be younger, better educated, better informed, more politically active, and have higher incomes (Warland et al, 1975; Best and Andreasen, 1977; Duhaime and Ash, 1979; Singh, 1989). Interestingly, consumers who complain seem to have higher levels of satisfaction with the products or services they deal with (Nyer, 2000).

All evidence is that complaining to third parties is a rare event for consumers. Warland et al (1975), Best and Andreasen (1977) and Kolodinsky (1993 and 1995) report between 5 percent and 7 percent of consumers with complaints utilized a third party. Lee and Soberon-Ferrer (1996) used data on persons 65 and over and found third-party complaining rates ranging from 3 percent (complaining to a federal agency) to 24 percent (complaining to the Better Business Bureau).

Singh (1989) found that consumers' use of third parties in complaint resolution was a function of their attitudes toward the product as well as their attitudes toward complaining, prior experience with third party actions, the perceived probability of success, and the perceived costs and benefits of seeking resolution. Tipper (1997) focused exclusively on third party complaints and found that the education, income, gender, knowledge of consumer rights, and attitudes toward business were associated with using third parties. The only significant factor associated with complaining to a federal agency was having a negative attitude toward business.

Satisfaction with Complaint Resolution Efforts

A 1979 Technical Assistance Research Program Institute (TARP) report indicated that 43 percent of respondents were "largely satisfied" while 54 percent were "largely dissatisfied" with the resolution of their complaints. Best and Andreasen (1977) and Gilly and Gelb (1982) indicate that the legitimacy of the complaint and the type of problem are often associated with consumers' obtaining a satisfactory response to their complaints. Problems that are more objective (breakage, mathematical error) rather than subjective in nature were more likely to be resolved to the consumers' satisfaction.

Repurchase intent and willingness to recommend a product or service to others is often used as a proxy for satisfaction with resolution efforts. Oliver (1997) reports a study by IBM that showed that customers with complaints that were resolved with "complete satisfaction" were more likely to repurchase and recommend IBM to others than those who had never experienced a problem.

Evidence on satisfaction specifically with third-party resolution efforts is sketchy at best. Best and Andreasen (1977) reported that 44 percent of consumers with service complaints were satisfied with the outcome of their complaints, 57 percent of those with complaints about infrequently purchased goods were satisfied with the outcome, and 66 percent of those with complaints about frequently purchased goods were satisfied. In contrast, only 27 percent of those using a third party were satisfied with the outcome of their complaints (21 percent reported their complaints were still pending).

Hogarth and English's 1997 descriptive study showed that 37 percent of consumers complaining to the Federal Reserve System in 1996 were satisfied with the final outcomes of their complaints and another 23 percent were "not completely" satisfied (40 percent reported that they were "not satisfied"). In this study, satisfaction was associated with income, the time it took to resolve the complaint, and whether the complaint was resolved in the consumer's favor. Those who were satisfied with the final outcome indicated that they were more likely to contact the

Federal Reserve again with another problem.

Summary

Previous research indicates that in addition to socio-economic and demographic characteristics of the consumers, their re-use or repurchase intentions (Oliver, 1997), the nature of the product (Best and Andreasen, 1977), and the nature of the problem (Gilly and Gelb, 1982) have been associated with consumers' satisfaction with complaint resolution efforts. From a cost-benefit framework, it is likely that prior efforts also may influence consumers' satisfaction with complaint resolution.

Much of the research on third party consumer complaining behavior is now quite dated. Marketplace innovations and changes in the ways consumers interact with these third parties may make these third parties more available and accessible to consumers. If such is the case, it may be helpful to know more about the factors that affect consumers' satisfaction with third party complaint resolution efforts, with an eye toward improving responses and increasing consumer satisfaction.

METHODOLOGY, DATA, AND ANALYSIS

Questionnaire Description and Data Available

The Consumer Satisfaction Questionnaire was designed to gather data considered relevant for monitoring the Federal Reserve's consumer complaint program, consistent with federal guidelines for respondent burden (the questionnaire is available at http:// www.federalreserve.gov/boarddocs/ reportforms/ forms/FR_137919991005_f.pdf). With help from consultants in the field of consumer complaining behavior, the questionnaire was substantially revised in 1999 to make it easier to use and interpret, to capture more specific data on satisfaction levels, and to collect new information, including demographic information on gender, age, household size, income, race, and education.

The questionnaire is sent out to all consumers whose complaints are shown as closed in the CAESAR System. The new form of the questionnaire was first sent out to consumers in October 1999. This study uses data from surveys sent out and returned from October 1999 through September 2000. Of the 1939 surveys sent out, 374 were completed and returned (a response rate of 19.2 percent).

Because we are able to link into the CAESAR System, our data set includes information from the Consumer Satisfaction Questionnaire plus information on the product complained about, the time it took to resolve the complaint, the source of the complaint (that is, whether the consumer complained directly to the Federal Reserve or was referred to us from another federal agency), the Reserve Bank that investigated the complaint, and whether the complaint was resolved in the consumer's favor.

The questionnaire includes a set of seven questions posed to consumers, all on a 1 to 5 scale, as to the degree of satisfaction they had with various aspects of the Federal Reserve's handling of their complaints. We used a Likert summated scale to measure overall satisfaction.

The analysis proceeds as follows: first we present a description of our sample; next we explore an ordinary least squares regression model of consumer satisfaction; finally we develop a logistic regression model of "very satisfied" consumers.

In our multivariate analyses, we explore variables related to the socio-economic and demographic characteristics of the complainants, the nature and characteristics of their complaints, their efforts prior to contacting the Federal Reserve, and measures of potential repeat use of the Federal Reserve complaint program.

RESULTS

Respondents and Non-respondents

Due to incomplete responses and missing information, we could only use 368 of the 374 completed surveys in our analysis. We compared these data with the 1259 observations of non-respondents to see if there were any systematic biases that could affect our results. The variables we could compare across the two groups were gender, region (determined by the Reserve Bank region handling the complaint), source of the complaint, product complained about, whether the complaint was resolved in the consumer's favor, and the time it took to resolve the consumer's complaint (measured by the number of days the complaint was in the Federal Reserve System). Another option to test for biases would involve comparing early and late respondents, since late respondents may more closely resemble non-respondents. However, the database does not contain information on the timing of responses; thus, this comparison could not be performed.

Respondents and non-respondents were similar with respect to gender, region, source of the complaint, product complained about, and the time it took to resolve (Table 3). Overall, people in the database were more likely to be male than female (54 vs. 40 percent, respectively). Nearly three-fifths complained to a Reserve Bank in the Southeast (Richmond, Atlanta) or the Board; one-fifth complained to a Reserve Bank in the Northeast (Boston, New York, Philadelphia); and the remaining one-fifth were divided among Reserve Banks in the Midwest and West. Recall that this distribution reflects the geography of the banks, not of the consumers who are registering the complaints. Two-thirds of both the respondents and non-respondents complained directly to the Federal Reserve; others were referred by other agencies.

With respect to their complaints, about half complained about credit cards, one-fourth complained about deposit products (savings, checking, certificates of deposit), one-seventh complained about loan products (including both real estate loans and consumer loans), and the remainder complained about other bank products or services.

As might be expected, the respondents were more likely to have had their complaint resolved in their favor (55 percent compared with 45 percent of non-respondents); that is, the consumer received a refund/credit or the bank was found to be in violation of a regulation and restitution was made. To the extent that satisfaction is correlated with complaint outcome, this difference may introduce a bias into our results.

On average, complaints were resolved in about 50 calendar days. These data were taken from the CAESAR System, and were simply the difference between the date the complaint case was opened and date it was closed. It is important to note that from the consumers' perspective, it may have seemed as if it took longer than seven weeks to close the case, especially for those whose complaints were referred from elsewhere.

Table 3
Comparison of Respondents and Non-Respondents (proportions, means, and medians)

Variable	Respondents	Non-respondents
N	368	1259
Gender		
Male	54.8%	54.7%
Female	40.8	39.4
Undetermined	4.3	5.9
Region		
Northeast	20.9	24.2
Southeast	59.2	55.7
Midwest	10.8	8.5
West	8.9	11.6
Consumer complained directly to Federal Reserve (vs. referral from other agency)	66.8	65.5
Product complained about		
Credit card	51.6	46.5
Deposit product	25.0	29.0
Loan product	14.4	15.5
Other product or service	9.0	9.0
Resolved in the consumer's favor	54.6	45.4*
Time to resolve		
Mean (in days)	49.9	52.5
Median (in days)	53	52

*Difference between respondents and non-respondents is significant at .05 or better.

Table 4
Means and Proportions of Other Variables Used in Analysis, Respondents Only

Variable	
Age	52
Income	
Mean	$111,085
Median	$52,500
Race (1=White)	68.7%
Education (1=more than high school)	83.2
Learned about Federal Reserve complaint program via (multiple responses allowed):	
Referral from other agency	43.6
Bank	13.6
Friend/relative	10.4
Lawyer	8.6
Internet/computer	8.6
Brochure/consumer resource handbook	7.0
Other, TV/media, magazines/newspapers	27.0
Amount involved in complaint	
Mean, including 0's	$12,474
Non-zero mean	$13,936
Median, including 0's	$600
Non-zero median	$985
Degree to which (1-5 scale)	
Complaint involved financial hardship	3.1
Complaint was resolved to my satisfaction	3.1
Response was clear	3.7
All issues raised in complaint were addressed	3.4
Willing to contact Federal Reserve again	3.9
Willing to refer others to Federal Reserve	3.9
Satisfaction with (1-5 scale)	
Assistance compared to expectations	3.6
Ease of contacting Federal Reserve	3.9
Courtesy in letters	4.3
Courtesy over phone	4.3
Time it took to resolve complaint	3.5
Thoroughness of Federal Reserve investigation	3.5
Outcome of complaint	3.3

Table 4 (cont.)

Variable	
Overall satisfaction (range 0-35)	22.9
0-7	7.5%
8-14	13.4
15-21	18.7
22-28	28.1
29-35	32.4
Very satisfied (score>=30)	28.6
Before contacting Federal Reserve, tried to resolve problem by (multiple responses allowed)	
Complaining to bank branch/office	51.5
Complaining to bank headquarters	49.9
Complaining to friends and family	30.3
Contacting local or state consumer agency	30.3
Stopping use of the service/bank	27.1
Contacting other federal agency	20.1
Contacting Better Business Bureau	16.9
Contacting lawyer	16.4
Changing banks	15.3
Contacting radio/TV/newspaper	5.3
Taking some other action	13.9
Took no other action; Federal Reserve was first	3.7

Description of the Respondent Sample

Overall, the respondents were older (mean age of 52, see Table 4), higher income (median income of $52,500), and more likely to be minority (31.3 percent) than U.S. households in general. Four-fifths (83 percent) had more than a high school education.

The largest proportion of consumers, 43 percent, said they learned of the Federal Reserve's complaint program through a referral from another agency. In fact one-third (32 percent) of the respondents' complaints were referrals from other agencies. About one out of eight (13 percent) said that their banks told them about the Federal Reserve's complaint program.

The average amount involved in the complaints was $12,474, but this mean is quite skewed; the median amount involved in the complaints was $600 (there were eight complainants with amounts over $100,000 that contribute to this skewness); of those reporting some non-zero amount involved in the complaint,

Table 5
OLS Regression Results on Overall Satisfaction Score
(significant results shown in bold)

Variable	Parameter Estimate	Probability
Intercept	17.27	0.00
Socio-economic characteristics		
Ln Income	0.34	0.27
Education (1 = more than high school)	-1.36	0.11
Demographic characteristics		
Age	0.01	0.62
Gender (1 = male)	0.21	0.76
Race (1 = white)	-0.18	0.79
Region (Northeast as base)		
Midwest	1.23	0.15
Southeast	-0.19	0.85
West	2.21	0.11
Characteristics of complaint		
Product complained about (other as base)		
Credit card	1.66	0.21
Deposit	1.53	0.24
Loan	1.41	0.30
Source of complaint (1 = direct from consumer)	**2.30**	**0.01**
Amount involved in complaint	1.35 (e-6)	0.75
Time to resolve complaint (days)	0.01	0.44
Resolved in consumer's favor	-0.09	0.90
Degree of financial hardship (factor score)	0.12	0.70
Prior efforts		
Used other third parties (factor score)	0.13	0.68
Private actions (exit, word of mouth; factor score)	-0.15	0.65
Voice to seller (factor score)	**0.59**	**0.08**
Potential repeat use		
Degree of responsiveness of Federal Reserve (factor score)	**4.68**	**0.00**
Repeat use/recommendation (factor score)	**4.36**	**0.00**
R^2		.62
N		315

55 percent reported amounts of $1000 or less. When asked about the degree of financial hardship caused by this complaint (1 being no hardship and 5 being extreme hardship), consumers placed their hardship squarely in the middle at 3.1.

We asked a series of questions about the degree to which the Federal Reserve was responsive and whether consumers would contact the Federal Reserve again or recommend the Federal Reserve to their friends or relatives. Most of the scores were in the mid-range, between 3 and 4 on a 5-point scale. For example, when asked about the degree to which the complaint was resolved to their satisfaction, the average was 3.1. We used factor analysis to determine if there

Table 6
Logistic Regression Results on Being "Very Satisfied"
(Satisfaction score 30 or more; significant results shown in bold)

Variable	Parameter Estimate	Probability	Odds Ratio
Intercept	-2.17	0.42	---
Socio-economic characteristics			
Ln Income	-0.10	0.63	0.90
Education (1 = more than high school)	**-1.33**	**0.07**	**0.26**
Demographic characteristics			
Age	-0.01	0.76	0.99
Gender (1 = male)	-0.10	0.79	0.90
Race (1 = white)	-0.10	0.82	0.91
Region (Northeast as base)			
Midwest	0.03	0.97	1.02
Southeast	-0.95	0.12	0.38
West	0.88	0.91	2.42
Characteristics of complaint			
Product complained about (other as base)			
Credit card	0.50	0.57	1.65
Deposit	1.19	0.15	3.30
Loan	-0.10	0.91	0.91
Source of complaint (1 = direct from consumer)	**1.43**	**0.01**	**4.18**
Amount involved in complaint	0.01	0.72	1.00
Time to resolve complaint (days)	0.01	0.86	1.00
Resolved in consumer's favor	**0.88**	**0.05**	**2.40**
Degree of financial hardship (factor score)	-0.12	0.55	0.88
Prior efforts			
Used other third parties (factor score)	**0.35**	**0.07**	**1.43**
Private actions (exit, word of mouth; factor score)	0.16	0.44	1.18
Voice to seller (factor score)	0.22	0.31	1.24
Potential repeat use			
Degree of responsiveness of Federal Reserve (factor score)	**2.75**	**0.01**	**15.70**
Repeat use/recommendation (factor score)	**3.13**	**0.01**	**22.87**
Log-likelihood ratio			195.95
R^2			0.46
Max re-scaled R^2			0.65
N			316

were common patterns among the responses, and found three factors. One factor formed around the willingness of consumers to contact the Federal Reserve again or recommend it to friends or relatives (designated repeat contact in the models). A second factor included measures of the Federal Reserve's responsiveness (addressed all the issues in the complaint, complaint resolved to consumer's satisfaction, etc.). The third factor was the degree of financial hardship involved in the complaint.

We also asked a series of questions relating to satisfaction with various aspects of the Federal Reserve's complaint program, again using a 5-point scale. Average satisfaction measures ranged from 3.3 (satisfaction with the outcome of the complaint) to 4.3 (courtesy of Federal Reserve staff in letters and over the phone). We used a Likert summated scale to measure overall satisfaction, with a range of 0 to 35. The mean satisfaction score was 22.9; three-fifths (60 percent) were satisfied or very satisfied (scores from 22 to 35); one third (32 percent) were very satisfied (scores from 29 to 35).

In an attempt to gather some information about complaining behavior patterns, we asked consumers what they did before they came to the Federal Reserve System; multiple responses were allowed. The largest proportions, 51 percent and 49 percent, complained to their banks or their banks' headquarters. Thirty percent said they complained to family and friends and 30 percent said they contacted a local or state consumer agency. We used factor analysis to see if there were common themes or patterns; three patterns emerged (factor scores not shown; data available from the authors). One group reported a combination of word of mouth (complaining to family and friends) and exit (changed banks or stopped using the particular service). A second group could be characterized as voicing to the seller (they complained to the bank branch or the main headquarters of their banks). The third group contacted other third parties (TV and radio consumer shows, the Better Business Bureau, a consumer protection agency, other federal regulators, or an attorney).

Multivariate Results -- OLS Analysis

Results on the ordinary least squares regression on the overall satisfaction score are presented in Table 5. Characteristics of the complaint, prior efforts, and potential repeat use of the Federal Reserve complaint program were significantly associated with the overall satisfaction score.

Consumers who complained directly to the Federal Reserve had higher satisfaction scores than those whose complaints were referred from other agencies. This dissatisfaction concerning referred complaints may stem from the amount of time it took to resolve the complaint. Although this analysis holds the time to resolve the problem constant, it is possible that consumers include the time their complaint was "in transit" during the referral process in their mental calculus.

Consumers who had higher factor scores on voicing to the seller (complaining to the bank) had higher satisfaction scores, but the increase was only 0.5. On the other hand, consumers who scored high on willingness to have repeat contact with the Federal Reserve and those who scored high on feeling that the Federal Reserve was responsive had higher satisfaction scores; this increase was on the order of more than four points out of a possible 35.

Multivariate Results -- Logit Analysis

Because the satisfaction scores were heavily skewed toward the positive end of the scale, we decided to explore the determinants of being "very satisfied" with the Federal Reserve's complaint handling program. We defined "very satisfied" as having a score of 30 or more on the Likert summated scale. The independent variables were the same as in the OLS estimation; results are presented in Table 6. Socio-economic characteristics as well as characteristics of the complaint, prior efforts, and potential repeat use of the Federal Reserve complaint program were significantly associated with being very satisfied.

Consumers with more than a high school education were only one-fourth as likely to be very satisfied as those with a high school education or less. It may be that more highly educated people bring a different set of expectations to the complaining process and thus may be more difficult to please.

Consumers who complained directly to the Federal Reserve were four times more likely to be very satisfied than those whose complaints were referred from other agencies. From an agency perspective, it would be interesting to know what aspects of the referral process lead to this "less than very satisfied" state; perhaps consumers feel that they are being passed off from one agency to another without much of a sympathetic ear from the government.

Consumers who had their complaints resolved in their favor were 2.4 times more likely to be very satisfied than those whose complaints were not resolved in their favor. This makes a certain amount of sense, since those whose complaints were not resolved in their favor may feel that the agency could have done more. It is important to note here that since respondents were more likely to have a favorable outcome that non-respondents, this parameter estimate may overstate the effect that complaint resolution has on satisfaction with the complaint process.

Consumers who scored high on the factor relating to "complained to third parties before coming to the Federal Reserve" were more likely to be very satisfied. Here, perhaps, is a measure of tenacity; these consumers tried a variety of routes before turning to the Federal Reserve. For these consumers, the Federal Reserve may be the last resort agency for resolving their problems. This measure may also be a proxy for total time involved in the complaint, since using another third party prior to contacting the Federal Reserve may increase the total time to resolution (keep in mind that our measure of time to resolve only counts the time the Federal Reserve System had the complaint).

Those who scored high on the repeat contact factor as well as those who scored high on the factor related to their perception of the Federal Reserve's responsiveness were more likely to be very satisfied. This is consistent with the results of other satisfaction-repeat purchase studies cited earlier.

SUMMARY AND CONCLUSIONS

Contrary to previous studies (see Best and Andreasen, 1977; Hogarth and English, 1997), we found that 60 percent of consumers who complained about financial services to a third party (specifically, to the Federal Reserve) were satisfied with the complaint resolution process; of these satisfied consumers, over half were very satisfied. One-fifth (21 percent) could be classified as dissatisfied.

In general, we find support for our model that satisfaction is a function of socio-economic characteristics of the consumer, characteristics of the complaint, consumers' prior efforts and consumers' potential repeat use of the third-party service.

Specifically, our data show that complaints coming directly from consumers are associated with higher levels of satisfaction. This argues that third parties should be easily available and accessible to consumers directly, rather than relying on referrals. In the case of the Federal Reserve, it may mean that the System needs to consider expanding marketing and outreach efforts in order to increase awareness of its complaint program and provide easy access to consumers with complaints.

Consumers with complaints resolved in their favor were more likely to be very satisfied. Clearly, resolution rests on the nature of the problem, and third parties may not be able to increase the rate of "resolved in the consumers' favor" through sheer force of will. However, third parties could provide consumers with a realistic set of expectations about what they can and cannot do in the problem resolution process. Perhaps by decreasing the gap between expectations and reality, third parties can improve consumers' satisfaction with their efforts.

Consumers' perception of the responsiveness of the third party was also a significant factor in their satisfaction, as was their expectation of repeat use. The message to third party complaint handlers is to maintain clear communication in a timely manner and address all aspects of the consumers' problems.

Limitations

This study has provided some additional insights into third-party complaint resolution efforts, and addresses some of the limitations in the Hogarth and English work in 1997. While an expanded and more detailed data set has enabled a more refined look at consumers' satisfaction with third-party efforts, it is still the case that the data only apply to the financial sector and cannot be generalized to the service sector as a whole. Perhaps even more specifically, these results may be relevant only to the banking industry and to federal-level, third party complaint programs.

Future Work

This study focused on only 12 months of data; as additional questionnaires are distributed and returned, it would be helpful to re-estimate the models with a larger data set to test the robustness of our results.

The questionnaires also provide additional data in the form of comments. Although we only send out the satisfaction questionnaire when a complaint is deemed to be "closed" because there are no further steps the Federal Reserve can take, about one out of six respondents wrote comments on their continuing efforts to resolve a problem that they feel is still "open." Reviewing and analyzing these closed-but-unresolved complaints may shed more light on issues related to consumers' satisfaction with third party complaint resolution efforts.

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ACKNOWLEDGEMENTS

We gratefully acknowledge the work of G. Christopher Lacey and Eugen Tereanu for assistance in preliminary work with these data.

DISCLAIMER

The analysis and conclusions set forth in this paper represent the work of the authors and do not indicate concurrence of the Federal Reserve Board, the Federal Reserve Banks, or their staff.

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PROBLEMS WITH CREDIT CARDS: AN EXPLORATION OF CONSUMER COMPLAINING BEHAVIORS

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ABSTRACT

Using data from the Survey of Consumers, this descriptive study attempts to provide a holistic picture of complaining behaviors, problem resolution, and satisfaction with the complaining process. We find less than one out of six households reported a problem; of those, nearly all took some sort of private or public action. About 7% used third parties, 11% took private action and 82% voiced to seller; over half (55%) exited. Consumers seemed to use a cost/benefit approach to complaining; those with more at stake took more assertive actions and spent more time pursuing their complaint. Consumers whose problems were resolved were more satisfied with the outcome and with the complaining process.

INTRODUCTION

Consumer complaining behavior has been studied extensively. We know about the antecedents of complaining, who complains and who doesn't, who people complain to, how and when they complain, which factors are associated with getting a problem resolved, and consumers' satisfaction with the complaining process. However, for the most part, these complaining behaviors have been studied separately in different studies with different data sets. To date, there has been little that could be characterized as a comprehensive, in-depth exploration of complaining behaviors or a holistic picture of how these behaviors are interrelated.

For the past 5 years, credit cards have been the number one complaint received by federal financial regulators (Federal Reserve Board, 2000). In addition, credit and lending complaints are in the top five complaint categories listed by the National Association of Consumer Agency Administrators and the Consumer Federation of America (NACAA, 2000). Also, consumer credit has caught the eye of Congress, both in their deliberation of bankruptcy reform and in ongoing legislative initiatives related to credit and credit cards (LaFalce, 2001). Thus, credit cards seem to be an appropriate subject for a case study on consumer complaining behaviors.

The purpose of this descriptive study is to explore the complaining behaviors of consumers who experienced problems with credit cards. In particular, we investigate the prevalence of problems, the characteristics of consumers with problems (more specifically, those who complain), the types of complaining behaviors consumers exhibit, the complaining processes consumers follow, the resolution or other outcomes of the complaining process, and satisfaction with the complaining process. We also investigate consumers' attitudes and how these relate to complaining behaviors.

BACKGROUND ON CREDIT CARD MARKETS

American consumers are using credit cards more than ever. More than 75% of the adult population in the United States have a credit card (Nilson Report, 2000) with an average of 4.2 cards per cardholder (Nilson Report, 1998). Estimates show that by the year 2015, 80% of the adult population will hold a credit card (Nilson Report, 2000). In 2000, credit card issuers mailed a record of 3.54 billion solicitations with over one billion solicitations in the fourth quarter alone. This corresponds to an average of three credit card offers per month per household (BAI Mail Monitor, 2001). During 1998, a total of 429.2 million VISA and MasterCards were in circulation (Federal Reserve Board, 1999). Between 1991 and 2001, consumers' outstanding revolving credit grew from $247 billion to $669 billion (Federal Reserve Board, 2001).

Currently, over 6,800 depository institutions issue VISA and MasterCard credit cards and independently set the terms and conditions of their plans (Consumer Reports 1998; Federal Reserve Board 1999). However, competition has changed credit card issuers' pricing strategy (Federal Reserve Board 1999). Credit card issuers are competing by waiving annual fees, providing enhancements, and since the early 1990's, lowering interest rates. In the past, credit card issuers offered programs with a single-interest rate, but more recently many of them have offered a broad range of card plans with differing interest rates depending on consumers' credit risk and usage patterns. For example, they offer lower rates to existing customers who have good payment records (prime or A markets) while maintaining relatively high rates for higher-risk (sub-prime or B/C markets) or late-paying cardholders. This aggressive competition has resulted in widening the variety of credit card choices for consumers, as well as potential problems.

PREVIOUS WORK IN THE CONSUMER COMPLAINT ARENA

Research on Problems and Complainers

There is a substantial body of literature profiling the nature and extent of problems consumers face in the marketplace and the factors associated with complaining about these problems (see Robinson, 1979, Andreasen, 1988 and Perkins, 1993 for bibliography and overviews of the state-of-the-art as of those dates). Best & Andreasen (1977) found an average 20 percent problem rate among infrequently and frequently purchased products and services, although these varied from 9 percent (cosmetics) to 35 percent (automobile repairs). Others have found rates as low as 14 percent for financial and insurance services (Day & Bodur, 1978) to as high as 48 percent for "ever having a problem with either a good or service" (the type of good or service was unspecified; Office of Fair Trading, 1986; see also Leigh and Day, 1981 and Zussman, 1983). Researchers have attributed complaining rates to how an industry is structured (Singh, 1991; Kolodinsky, 1995). Complaints appear to be higher in industries that have greater competition.

Turning to who bothers to complain when they experience a problem, we again find a range of complaining rates. Oster (1980) reports on Better Business Bureau data with product complaint rates ranging from one complaint for ever 20 million transactions (for food/grocery stores) to one complaint for every 300 transactions (for home furnishings). She also cites service complaint rates ranging from one complaint for every 1.6 million transactions (for hotels and motels) to one complaint for every 500 transactions (for roofing). These rates, however, seem extraordinarily low and may be a vestige of the BBB data set. Best & Andreasen (1977) report complaining rates ranging from 14 percent (for cosmetics) to 59 percent for mail order purchases. The Technical Assistance Research Program (TARP, 1979) reported that 31 percent of consumers with problems did not complain, while an A.C. Nielsen study (1981) found that for "small problems" only 3 percent would complain and 30 percent would return the product; the remaining 67 percent would do nothing. In a 2001 follow-up study, TARP reported complaining rates of 16 percent for "serious problems with no field or retail contact" to 0.05 percent (one in 2000) for "less serious problems, where there is an extensive field service organization" (TARP, 2001; p. 8).

Consumers' propensity to complain is influenced by their assessment of the costs and benefits (Landon, 1977; Richins, 1980; Day et al, 1981; Gronhaug and Gilly, 1991; Cho and Joung, 1999) and their estimate of the probability of success (Day et al, 1981; Blodgett et al, 1995; Kolodinsky, 1995). There are situational characteristics that influence complaining behaviors, including degree of dissatisfaction (Oliver, 1986; Maute and Forrester, 1993) and perceived alternatives (Maute & Forrester, 1993). Consumers' attitudes toward seeking redress are also important determinants (Hirschman, 1970; Richins, 1980, 1982; Bearden, 1983; Singh, 1990; Cho & Joung, 1999), as are the consumers' ability and motivation to complain (Oliver, 1997). The marketplace and industry structure also influences complaining behaviors; for example, consumers dealing with "loose monopolies," such as the medical services industry, may have different complaining behaviors than when dealing with more competitive markets (Andreasen, 1985; Singh, 1991; Kolodinsky, 1993). Kolodinsky (1995) also identifies constraints (e.g. time available) and learning (e.g. previous complaining experiences) as factors influencing consumer complaining behaviors.

Typologies of Complaining Behaviors

The seminal framework used to categorize complaining behaviors is that of Hirschman (1970) who identified three categories: 1) loyalty (that is, not complaining), 2) exit (stop using the dissatisfying product or service), and 3) voice (complaining). Over the years there have been numerous modifications made to this typology. The concepts of private action (complaining to family and friends or other word of mouth complaining) versus public action as well as differentiating between voicing to sellers/merchants versus voicing to third parties have been developed and incorporated into this typology by Best & Andreasen (1977), Singh (1988, 1989, 1990), Kolodinsky & Aleong (1990), Kolodinsky (1995), and Lee & Soberon-Ferrer (1996, 1999).

The Complaining Process – What Do You Do and When Do You Do It?

Few studies have attempted to explore and identify a hierarchy of consumer complaint behavior. Some studies have attempted to rank or rate complaining activities in a hierarchy of degree of intensiveness, usually from the very passive (decide not to buy the product or service or deal with that company again) to the most assertive (consult/hire a lawyer). Gronhaug (1977) studied the likelihood that consumers who complained to a seller would go on to complain to a consumer agency. He found that 85% of consumers using a local consumer agency had tried to solve the problem by first going to the seller/merchant; thus, for all but 15%, the hierarchy is to first try for resolution with the seller before involving a third party.

Outcomes of Complaints and the Complaint Process

Consumers' expectations about the outcome of the complaint may differ by whether there is money involved (Gilly & Gelb, 1982), although nonmonetary influences were also important in consumers' satisfaction with the outcome. Gilly (1987) provides an overview of post-complaint studies and consumers' satisfaction with the complaint response. Some of these studies focused on resolution of the problem (TARP, 1979), while others are less specific as to whether the satisfaction is with the resolution or with the response to the complaint, which may not be a resolution per se. Oftentimes, outcomes are measured as re-purchase intentions (Gilly, 1987; Bennett, 1997; Oliver, 1997; Fisher et al, 1999) or willingness to recommend the product or service to others (Hogarth & English, 1997; Fisher et al, 1999). Nyar (2000) presents some evidence that consumers who were encouraged to complain actually were more likely to purchase the service complained about (in this case, a health club membership). On the other hand, Kolodinsky (1993) found that even when complaints are resolved, consumers have lower probabilities of repurchasing.

Using satisfaction with the outcome as their measure of resolution, Best & Andreasen (1977) found that satisfaction rates ranged from 30 percent (for complaints about car parking) to 81 percent (for complaints about washers and dryers). Fisher et al. (1999) measured the discrepancy between the offer of resolution from the seller and the consumer's preference for resolution; most consumers felt the resolution offered was insufficient.

In summary, while a lot is known about various parts of the complaining process and complaining behaviors, no single study has provided a holistic picture of how these complaining behaviors and processes relate. This study begins to fill that gap.

DATA

The Surveys of Consumers were initiated in the late 1940s by the Survey Research Center at the University of Michigan. The purpose of these surveys is to measure changes in consumer attitudes and expectations with regard to consumer finance decisions. Each monthly telephone survey of 500 households includes a set of core questions covering consumer attitudes and expectations along with socioeconomic and demographic characteristics (see Curtin, 2001 for more information).

In October through December, 2000, the Federal Reserve Board commissioned additional questions on the Surveys of Consumers, including specific questions on consumers' complaining behaviors; the resulting data set included 1,500 respondents. In particular we asked about consumers' holding of secured credit cards (credit cards that require a security deposit), bank-type credit cards (Visa, MasterCard, Discover, American Express Blue), travel and entertainment cards (American Express, Diners Club), and store-based credit cards (Sears, Penneys, etc.); their satisfaction with these cards, and any problems they had with these cards.

We then asked a series of follow-up questions on the most recent problem consumers experienced, including information on the nature of the problem; the amount of money involved; the steps consumers took to resolve the problem and the order of these steps; whether the problem was resolved and how it was resolved (e.g. money was recovered); the amount of time spent pursuing resolution; and satisfaction with the outcome of the complaint and with the complaint process. If consumers did not pursue the problem or stopped pursuing the problem, we asked follow-up questions on reasons for not taking further action. Finally, we asked a series of questions on preferences for how to register complaints (phone, e-mail, in-person, etc.) and a set of questions related to consumers' knowledge and attitudes about credit cards, financial institutions, and complaining.

RESULTS

Who Has a Problem?

Of the 1,500 respondents, 1,062 indicated they had at least one credit card. Of these, 166 (15.6%) indicated they had at least one problem within the past 12 months (Table 1). Overall, there were 428 separate problems reported by these 166 households (an average of 2.6 problems per household over the 12-month period). Two-fifths (44.6%) indicated they had only one problem, one-third (35.5%) indicated they had two or three problems, one out of seven (14.5%) indicated they had four to six problems, and one out of 20 (5.4%) indicated they had seven or more problems (Table 2). These results indicate that credit card problems appear to lie within the range found by Best & Andreasen (1977).

Demographically, respondents with credit card problems were more likely to be single, slightly younger, more highly educated, had higher income, and were more likely to live in the western region than respondents without problems (Table 1).

Respondents with problems reported lower satisfaction ratings with their cards (Table 3). For example, respondents with bank-type cards and no problems rated their satisfaction at 8.3 out of 10, while those with a problem rated their satisfaction at 5.7. This satisfaction differential was even larger for those with secured cards;

Table 1
Demographic Characteristics of Households

Characteristic	Have credit card and problem	Have credit card and no problem	Have credit card	Full sample	By type of action taken on problem: No action	Private action	Voiced to seller	Third party	Any problem
Number of households	166	896	1,062	1,500	6	18	131	11	166
As % of all households with a problem	100	-	-	-	3.6	10.8	78.9	6.6	100
As % of households with credit cards	15.6	84.4	100.0	-	0.6	1.7	12.3	1.0	15.6
Demographic Characteristics									
Marital Status & Gender									
Married	59.0	62.3	61.8	57.2	33.3	55.6	61.1	54.5	59.0
Single male	19.9	15.1	15.8	17.4	66.7	11.1	19.1	18.2	19.9
Single female	21.1	22.7	22.4	25.6	0.0	33.3	19.8	27.3	21.1
Race or Ethnicity									
White	87.8	85.0	85.5	82.6	100.0	94.1	88.5	63.6	87.8
Black	5.5	8.3	7.9	8.6	0.0	5.9	5.4	9.1	5.5
Hispanic	3.0	3.4	3.4	5.4	0.0	0.0	2.3	18.2	3.0
Other or missing	3.7	3.2	3.3	3.4	0.0	0.0	3.8	9.1	3.7
Age -Mean	44.3	47.8	47.2	47.4	49.5	43.6	45.0	34.4	44.3
Age -Median	44	45	45	45	47	43	45	32	44
Education									
Mean	14.7	14.2	14.2	13.7	14.5	14.2	14.8	13.6	14.7
Median	15.5	14	14	14	14.5	16	16	14	15.5
High school or less	21.7	30.9	29.5	37.8	16.7	27.8	19.8	36.4	21.7
Some college	28.3	29.2	29.1	28.7	50.0	16.7	26.7	54.5	28.3
College or more	50.0	39.8	41.4	33.5	33.3	55.6	53.4	9.1	50.0
Region									
Northeast	19.3	21.1	20.8	20.2	16.7	27.8	19.1	9.1	19.3
Midwest	19.3	24.9	24.0	24.7	33.3	11.1	18.3	36.4	19.3
South	35.5	33.1	33.5	34.7	33.3	44.4	35.9	18.2	35.5
West	25.9	20.9	21.7	20.3	16.7	16.7	26.7	36.4	25.9
Family Income									
Mean	67,667	65,027	65,440	58,714	45,625	58,333	72,427	38,273	67,667
Median	50,000	50,000	50,000	50,000	49,375	48,750	52,000	40,000	50,000
<=20,000	9.6	10.6	10.5	15.5	0.0	22.2	6.9	27.3	9.6
20,001 -40,000	23.5	20.4	20.9	22.4	33.3	11.1	23.7	36.4	23.5
40,001 -80,000	38.6	47.7	46.2	44.0	66.7	38.9	38.2	27.3	38.6
>80,000	28.3	21.3	22.4	18.1	0.0	27.8	31.3	9.1	28.3

those without problems rated their satisfaction at 7.7, compared to 4.2 for those with problems.

Respondents with problems tended to have more cards than those with no problem (Table 2). Respondents with problems were more likely to hold a bank card in combination with a travel and entertainment or store card. They appeared to have the same APR (annual percentage rate) on their credit cards as those without problems (14.8% APR vs. 15.1% APR, respectively), but

Table 2
Credit Card Characteristics of Households

					By type of action taken on problem				
Characteristic	Have credit card and problem	Have credit card and no problem	Have credit card	Full sample	No action	Private action	Voiced to seller	Third party	Any problem
Number of households	166	896	1,062	1,500	6	18	131	11	166
Number of households by type of card									
Bank only	54	386	440	440	3	5	45	1	54
Bank and other	89	342	431	431	3	11	69	6	89
Other only	4	120	124	124	-	1	3	-	4
Bank and secured	8	15	23	23	-	-	5	3	8
Secured only	5	14	19	19	-	-	4	1	5
Bank, secured, and other	5	11	16	16	-	-	5	-	5
Secured and other	1	8	9	9	-	1	-	-	1
No card	-	-	-	438	-	-	-	-	-
Percentage of households by type of card									
Bank only	32.5	43.1	41.4	29.3	50.0	27.8	34.4	9.1	32.5
Bank and other	53.6	38.2	40.6	28.7	50.0	61.1	52.7	54.6	53.6
Other only	2.4	13.4	11.7	8.3	-	5.6	2.3		2.4
Bank and secured	4.8	1.7	2.2	1.5	-	-	3.8	27.3	4.8
Secured only	3.0	1.6	1.8	1.3	-	-	3.1	9.1	3.0
Bank, secured, and other	3.0	1.2	1.5	1.1	-	-	3.8	-	3.0
Secured and other	0.6	0.9	0.9	0.6	-	5.6	-	-	0.6
No card	-	-	-	29.2	-	-	-	-	-
Number of cards									
Mean	3.7	2.7	2.9	2.9	3.8	2.9	3.8	3.5	3.7
APR on credit card with highest balance or most often used									
Mean	14.8	15.1	15	15.2	11.7	14.7	14.6	18.4	14.8
Median	16	16	16	16	13	16	16	18	16
Percentage of households that are revolvers	68.1	59.9	61.2	43.3	83.3	61.1	66.4	90.9	68.5
Number of months carry balance for those that are revolvers (over the past 12 months)									
Mean	8.0	7.3	7.5	7.4	11.6	7.6	8.1	4.9	8.0
Median	12	7	8	8	12	12	12	2.5	12
Number of problems									
1	44.6	-	7.0	3.0	33.3	55.6	45.8	18.2	44.6
2-3	35.5	-	5.6	2.4	50.0	38.9	34.4	36.4	35.5
4-6	14.5	-	2.3	1.0	16.7	5.6	13.7	36.4	14.5
7-9	1.8	-	0.3	0.1	0	0	2.3	0	1.8
>=10	3.6	-	0.6	0.2	0	0	3.8	9.1	3.6
Total number of problems	428	-	428	428	13	31	343	41	428
Average number of problems	2.6	-	0.4	0.3	2.2	1.7	2.6	3.7	2.6

Table 3
Degree of Satisfaction & Seriousness of Problems, by Type of Credit Card

	Problem with Card	No Problem with Card	All Obs.
Degree of satisfaction (0 being not satisfied at all and 10 as satisfied as could be)			
For those with a secured card, satisfaction with secured card	4.2	7.7	6.8
For those with a bank card, satisfaction with bank card	5.7	8.3	8.0
Seriousness of problems (0 being not serious at all and 10 being extremely serious)			
For those with a problem on secured card, seriousness of problems	6.6	-	6.6
For those with a problem on bank card, seriousness of problems	4.8	-	4.8
Total number of observations with a secured card	16	51	67
Total number of observations with a bank card	135	775	910

they were more likely to be revolvers (individuals that carry over a balance) and to revolve over longer periods of time.

Of the 166 households reporting credit card problems, the largest proportion of the most recent problems, 75%, were with bank-type cards, the most prevalent type of card (Table 4), followed by travel and entertainment and store cards (designated as "other") at 17%; nearly 8% had their most recent problem with a secured credit card. Fees (annual, late payment, cash advance, and application fees; penalty charges; and interest rates and terms) were the most frequently reported problem (36%), followed by billing errors (28%) and other (credit reporting, credit limits, pre-approved solicitations, debt collection, unauthorized use of the card, perks, disclosure problems; 27%). Most problems, 77%, were with the credit card issuer, although one out of six (16%) reported a problem at point-of-sale.

In general, people were relatively dissatisfied with the problems they encountered; these were serious problems. On a scale of 0 (slightly dissatisfied) to 10 (absolutely furious), the mean was 6.3 and the median was 7. The amount of money involved in the dispute/complaint was highly skewed; the average was around $900, with a median of $100 (Table 5).

With respect to knowledge and attitudes, respondents with problems were more likely to say they knew what to do with a credit card problem, they were bothered if they did not complain, and they had slightly more negative attitudes toward financial institutions (Table 6).

Who Complains?

Who, then, bothered to complain? Surprisingly, 96% (160 out of 166) reported taking some action on their problem (Table 1). Given the small number of non-complainers (those reported as "no action" in the tables), the characteristics of complainers become identical to those with problems. That is, they were more likely to be single, slightly younger, more highly educated, had higher income, and were more likely to live in the western region.

Due to the low number of non-complainers, it was not possible to conduct further statistical tests between complainers and non-complainers. However, it appears that non-complainers may tend to hold more credit cards (4 versus 3, at the median), have lower APRs, be more likely to revolve, and carry a balance longer than complainers (Table 2).

Non-complainers seemed more likely to have problems with bank-type cards, while a higher proportion of complainers reported problems with secured cards (Table 4). Non-complainers seemed more likely to report other problems (credit reporting, credit limits, pre-approved solicitations, debt collection, unauthorized use of the card,

Table 4
Credit Card Characteristics of Households by Type of Action Taken on Problem

	No action	Private action	Voiced to seller	Third party	Any problem
Number of households by type of action	6	18	131	11	166
Number of households that exited by type of action	-	15	65	11	91
Percentage of households by type of card with problem			(141)*	(12)*	
Bank only	83.3	77.8	72.5	45.5	71.7
Bank and other			5.3		4.2
Other only	16.7	16.7	13.7	27.3	15.1
Bank and secured*			1.5	9.1	1.8
Secured only*		5.6	6.1	18.2	6.6
Bank, secured, and other*					
Secured and other*			0.8		0.6
No card	-	-	-	-	-
Type of card with most recent problem					
Bank	83.3	77.8	76.3	45.5	74.7
Other	16.7	16.7	16.8	27.3	17.5
Secured	0.0	5.6	6.9	27.3	7.8
Type of problem on card with most recent problem					
Billing errors	16.7	22.2	28.2	45.5	28.3
Customer service	0.0	11.1	9.9	0.0	9.0
Fees	33.3	33.3	35.9	36.4	35.5
Other	50.0	33.3	26.0	18.2	27.1
Entity with which the problem is associated					
Credit card issuer	66.7	83.3	77.1	72.7	77.1
Credit bureau			2.3	9.1	2.4
Point of sale	33.3	11.1	16.0	9.1	15.7
Credit card issuer, credit bureau, and point of sale			0.8		0.6
Don't know, not applicable		5.6	3.8	9.1	4.2
Dissatisfaction with problem (0 being "slightly dissatisfied" and 10 being "absolutely furious")					
Mean	5.3	5.6	6.3	7.9	6.3
Median	5	6	7	10	7.0
Hours to resolve/resolving problem					
Mean	-	1.7	3.3	7.0	3.4
Median	-	1	1	2.5	1
Months pursued/pursuing problem					
Mean	-	3.1	1.9	4.5	2.2
Median	-	1	1	4	1
Number of Different Actions Taken**					
1	-	44.4	39.7	-	37.5
2-3		55.6	48.1	9.1	46.3
4-5			12.2	72.7	15.0
6-7				9.1	0.6
8	-	-	-	9.1	0.6
Average Number of Different Actions Taken**	-	1.8	2.2	4.7	2.3

* Overall, 141 respondents voiced to seller and 12 respondents complained to a third party with multiple problems or on more than one type of card.
All other data reflect the single, most recent problem.
** This refers to the number of different actions taken and not the number of *total* actions taken

perks, disclosure problems, etc.), while complainers were more likely to say their problems related to billing errors or fees.

As might be expected, non-complainers seemed less dissatisfied than complainers. For those that took no action, the mean dissatisfaction

Table 5
Amount of Money Involved and Recovered by Type of Action Taken on Problem

	No action	Private action	Voiced to seller	Third party	Any problem
Number of households by type of action	6	18	131	11	166
Households that had money involved with problem					
Number of households	4	14	109	10	137
As % of all households	66.7	77.8	83.2	90.9	82.5
Total amount of money involved	199	8,055	102,972	10,667	121,893
Amount of money involved for households that had money involved with problem					
Mean	50	620	953	1,067	903
Median	45	100	100	500	100
Households that had money involved with problem and recovered any amount of money					
Number of households	-	3	63	4	70
As % of all households that had money involved	-	21.4	57.8	40.0	51
As % of all households	-	16.7	48.1	36.4	42
Total amount of money recovered	-	600	16,838	1,717	19,155
Percent of money recovered	-	7.4	16.4	16.1	15.7
Amount of money recovered for households that had money involved with problem and recovered any amount of money					
Mean	-	200	267	429	274
Median	-	200	60	345	95
% of money recovered (of the total amount involved) for those that had money involved with problem & recovered any money					
Mean	-	56.7	84.7	100	84.4
Median		50	100	100	100

score was 5.3 out of 10, compared with 5.6 for those taking private action, 6.3 for those voicing to seller, and 7.9 for those using a third party (Table 4).

Furthermore, non-complainers seemed to have less at stake with their problems. The average amount involved in the problems of non-complainers was $50 compared with over $900 for the complainers (Table 5).

Although we could not test for significance, it seems that there may be knowledge and attitudinal differences between non-complainers and complainers. For example, non-complainers seemed less likely to read news about financial issues but seemed to feel more informed and knowledgeable about credit cards and what to do with a problem (Table 6). They were less likely to say they complained when dissatisfied but more likely to say that consumers should do this. They also seemed to have more positive attitudes toward financial institutions.

The Complaining Process – Who Do You Complain To?

Of the numerous typologies that exist for classifying complaining behaviors, we opted to use the private action/public action categories. Because of our special interest in third-party complaining, we subdivided the public action category into "voice to seller" and "third party" (Singh, 1988). The majority of people with problems that took action, 131 or 82%, were categorized as complaining to the seller (the credit card company, the bank, the point-of-sale; Table 1). The next largest group, 18 or 11%, was categorized as private action (complaining to friends and family or exiting without any other

Table 6
Attitudinal Characteristics of Households

Characteristic	Have credit card and problem	Have credit card and no problem	Have credit card	Full sample	No action	Private action	Voiced to seller	Third party	Any problem
				By type of action taken on problem					
Number of households by type of action taken	166	896	1,062	1,153*	6	18	131	11	166
Attitudinal Characteristics									
Knowledge									
Read news about financial issues	52.4	50.9	51.1	50.7	16.7	38.9	57.3	36.4	52.4
Use inform. to decide about fin. services	75.9	74.3	74.6	74.6	83.3	55.6	78.6	72.7	75.9
Knowledgeable about credit cards	77.1	78.3	78.2	77.3	100.0	61.1	78.6	72.7	77.1
Know what to do with a credit card problem	81.9	88.3	87.3	87.4	100.0	72.2	84.0	63.6	81.9
Consumer Assertiveness									
Bothered when do not complain	75.9	71.0	71.8	71.3	50.0	66.7	80.2	54.5	75.9
Complain when dissatisfied	66.3	65.3	65.4	64.9	33.3	55.6	70.2	54.5	66.3
Consumers should complain when dissatisfied	93.4	94.6	94.4	93.8	100.0	88.9	93.9	90.9	93.4
Can say no to sellers	91.0	89.7	89.9	89.6	66.7	77.8	93.9	90.9	91.0
More likely to act on unsatisfactory experience	66.9	65.6	65.8	65.5	66.7	50.0	67.9	81.8	66.9
Attitude Towards Banks									
"Let the buyer beware" is the motto of fin. inst.	54.2	53.8	53.9	53.8	33.3	38.9	55.7	72.7	54.2
Most fin. inst. care only about profit	57.8	52.6	53.4	53.3	50.0	61.1	54.2	100.0	57.8
Fin. inst. control "things" that cause consumers prob.	53.0	53.7	53.6	53.5	50.0	38.9	54.2	63.6	53.0
Attribution									
Reluctant to ask to explain if do not understand	22.9	22.7	22.7	23.2	16.7	22.2	21.4	45.5	22.9
Top three preferences in method of complaining about credit card									
Complaining in person	42.1	31.2	32.9	32.2	16.7	62.5	42.0	27.3	42.1
Calling a toll free phone number	93.9	93.0	93.2	93.3	100.0	100.0	93.9	81.8	93.9
Calling a non-toll free phone number	29.3	34.9	34.0	34.2	33.3	50.0	27.5	18.2	29.3
Complaining through an internet web-page	16.5	15.8	15.9	15.8	0.0	6.3	18.3	18.2	16.5
By regular mail	39.0	42.9	42.3	42.3	66.7	37.5	35.9	63.6	39.0
By e-mail	42.1	34.8	35.9	35.8	50.0	18.8	43.5	54.5	42.1
By fax	16.5	19.7	19.2	19.3	16.7	6.3	16.8	27.3	16.5
Some other method	0.6	0.1	0.2	0.3	0.0	0.0	0.8	0.0	0.6

* The attitudinal questions were only asked to the respondents that had a credit card. Although there were 1,153 respondents that said that they had a credit card, 1,062 answered the questions regarding the type of credit card they owned.

Table 7
Type of Action Taken for Those with a Problem and Who Took Action*

Type of Action	Private action	Voiced to seller	Third party	Any action
Collective Actions				
Just private	16.7	--	--	1.9
Just seller	--	40.5	--	33.1
Just exit	38.9	--	--	4.4
Private & seller	--	9.9	--	8.1
Private & exit	44.4	--	--	5.0
Seller & exit	--	25	--	20.6
Third party & exit	--	--	45.5	3.1
Private, seller & exit	--	24.4	--	20.0
Private, third party & exit	--	--	54.6	3.8
Specific Actions				
Complain to family and friends	61.1	34.4	54.5	38.8
Stop using the credit card in question	77.8	45.0	100	52.5
Decide not to use the instit. associate with problem in the future	38.9	33.6	72.7	36.9
Contact the credit card issuer	--	100	90.9	87.5
Contact the Better Business Bureau	--	--	54.5	3.8
Contact a lawyer about legal action	--	--	54.5	3.8
Contact local/state agency	--	--	9.1	0.6
Contact Federal Reserve System	--	--	9.1	0.6
Contact other federal agency	--	--	--	--
Go to court	--	--	9.1	0.6
Take other actions	--	3.1	9.1	3.1
Total number of observations	18	131	11	160
As % of all observations that took action (n=160)	11.3	81.9	6.9	100

* There are 6 observations with a problem that took no action

activity). As expected from other studies, the smallest group, 11 or 7%, reported using some third party (a Better Business Bureau; a federal, state or local agency; a lawyer; or went to court) in their complaint.

We included Hirschman's concept of "exit" as a separate activity over and above the classification scheme above. A substantial proportion of the respondents, 55%, stopped using the credit card or stopped using the financial institution involved with the problem (Table 4). The proportion of exiters was highest among those who used third parties (100% exited) and those who took private action (83%).

We also looked at the collective complaining activities of respondents according to the private action/public action categories (Table 7). Two out of five respondents used only one type of complaining channel (private action, voice to seller, exit) while three-fifths used multiple channels. It is interesting to note that among respondents that contacted third parties, more than half, 54 percent, contacted a lawyer. This is greater than the combined action of contacting a local, state or federal agency. It may be the case that few people know the functions of financial regulatory agencies at both the state and federal level.

Table 8
Order in which Took Action for Those with a Problem

		First	Second	Third
For all households with a problem that took action*				
Complain to family and friends		13.8	23.0	17.8
Stop using the credit card in question		15.0	41.0	23.3
Decide not to use the instit. associate with problem in the future		3.1	12.0	37.0
Contact the credit card issuer		68.1	19.0	13.7
Contact the Better Business Bureau			1.0	2.7
Contact a lawyer about legal action				4.1
Take other actions			4.0	
Unknown				1.4
Total number of observations		160	100	74
As % of all observations that took action (n=160)		100.0	62.5	46.3
For all households that took private action				
Complain to family and friends		38.9	20.0	50.0
Stop using the credit card in question		50.0	40.0	25.0
Decide not to use the instit. associate with problem in the future		11.1	40.0	25.0
Total number of observations		18	10	4
As % of all observations that took private action (n=18)		100.0	55.6	22.2
For all households that voiced to seller				
Complain to family and friends		10.7	24.1	17.2
Stop using the credit card in question		8.4	43.0	22.4
Decide not to use the instit. associate with problem in the future		2.3	7.6	43.1
Contact the credit card issuer		78.6	20.3	15.5
Take other actions			5.1	
Unknown				1.7
Total number of observations		131	79	58
As % of all observations that voiced to seller (n=131)		100.0	60.3	44.3
For all households that took a third party action				
Complain to family and friends		9.1	18.2	9.1
Stop using the credit card in question		36.4	27.3	27.3
Decide not to use the instit. associate with problem in the future			18.2	9.1
Contact the credit card issuer		54.6	27.3	9.1
Contact the Better Business Bureau			9.1	18.2
Contact a lawyer about legal action				27.3
Total number of observations		11	11	11
As % of all observations that took a third party action (n=11)		100.0	100.0	100.0
Reason for not taking any action for those that took no action				
Not worth time or effort	33.3			
Did not think it would help	33.3			
Happened too recently	16.7			
No response	16.7			
Total number of observations	6			
As % of all observations with a problem (n=166)	3.6			

* There are 6 observations with a problem that took no action

Again, significance testing for differences was difficult due to small and uneven cell sizes. However, it is the case that respondents who used third party complaint mechanisms seem different from those who took private actions or voiced to sellers. Respondents who used third parties were more likely to be single, minority, younger, less educated live in the Midwest or West, and have lower incomes (Table 1). While they tended to have the same number of cards as those who took private action or complained to sellers, they had higher APRs, and a larger proportion were revolvers, although they revolved over shorter periods of time (Table 2). They also reported an average of 3.7 problems with the credit cards they have, compared with 1.7 problems for those who took private action and 2.6 for those who voiced to sellers.

Respondents who used third parties were more likely to have problems with secured credit cards or other credit cards (including store credit cards), and they were more likely to report that the problem was a billing error (Table 4). In comparison to respondents who used other avenues of complaining, respondents who complained to a third party were more likely to report that the problem was with a credit bureau (as opposed to the card issuer or point of sale). Those in the third party complaint category also reported higher levels of dissatisfaction with their problems (a mean of 7.9 out of 10; Table 4) and a higher amount of money involved in their complaint (a mean of over $1,000 with a median of $500; Table 5).

There were also some differences in knowledge and attitudes among the respondents by the type of action they took (Table 6). Those using third parties were less likely to read news about financial issues and were less likely to say they knew what to do about a credit card problem. They reported being more assertive; they were more likely to say they would act on an unsatisfactory experience, and they were willing to ask for explanations if they did not understand something in a transaction. They also held more negative attitudes toward financial institutions than those who took other actions.

The Complaining Process: What Steps Do Consumers Take?

Table 6 displays the steps taken in the complaining process for respondents that had a problem and took some sort of action. Overall, 68% of all respondents contacted the credit card issuer as their first step in the compliant process. The second and third steps, however, are more dispersed among different types of actions. The most frequently reported action in the second step of the complaint process was to discontinue the use of the credit card in question; 41% used this method. Of those that went on to take a third step, 37% reported that they had decided not to use the institution associated with the problem in the future.

It is also important to know if the overall order of first contacting the credit card issuer, followed by discontinuing the use of the problematic credit card, and finally not using the institution associated with the problem differs by the type of action taken. While a significant proportion of the respondents who voiced to seller follow this pattern, respondents who took only private action(s) exhibited a very different complaining behavior pattern. Generally, this group's first action was to "stop using the credit card in question." If their first action was not "stop using the card," this tended to be their second step. For those that stopped using the card as the first step, their second step was to not use the institution associated with the problem. Their most frequently reported third action was to complain to family and friends.

Like the respondents that voiced to seller, more than one half of the respondents that took a third party action contacted the credit card issuer as the first step. Their second step tended to be either to contact the credit card issuer or to stop using the credit card in question. Only one respondent contacted a third party, a Better Business Bureau (BBB), in the second step of the complaint process. It is primarily in the third step that respondents contacted a third party. Of all respondents that took a third party action, 45.5%

Table 9
Degree of Satisfaction with Complaint Process by Type of Action Taken on Problem

	No action	Private action	Voiced to seller	Third party	Any problem
Number of households still pursuing problem	-	-	12	4	16
Number of households with problem left unresolved	6	10	29	-	45
Number of households with problem resolved	-	8	90	7	105
Percent of households still pursuing problem	-	-	9.2	36.4	9.6
Percent of households with problem left unresolved	100	55.6	22.1	-	27.1
Percent of households with problem resolved	-	44.4	68.7	63.6	63.3
Number of households still pursuing problem & exited	-	-	5	4	9
Number of households with problem left unresolved & exited	-	8	22	-	30
Number of households with problem resolved & exited	-	7	38	7	52
Percent of households still pursuing problem & exited	-	-	41.7	100	56.2
Percent of households with problem left unresolved & exited	-	80.0	75.9	-	66.7
Percent of households with problem resolved & exited	-	87.5	42.2	100	49.5
For those still pursuing the problem					
Degree of satisfaction* with complaint process so far	-	-	3.5	1.3	3
For those with problem left unresolved					
Degree of satisfaction* with complaint process	-	3.2	2.6	-	2.7
Degree of satisfaction* with how things turned out	-	5.4	2.5	-	3
Num. of hholds not comp. satisf. with how things turned out	-	5	25	-	30
As % of households with problem left unresolved	-	50.0	86.2	-	66.7
Reason for not taking any other action for those who were not comp. satisf. with how things turned out and problem left unresolved (in percents)					
Not worth time or effort	-		44.0		36.7
Did not think it would help	-	20.0	24.0		23.3
Did not know what else to do	-	40.0	8.0		13.3
Thinking about taking some action in the future	-		4.0		3.3
Fin. instit. explained its policies but situation still not satisfactory	-	20.0	16.0		16.7
The problem was resolved	-	20.0	4.0		6.7
For those with problem resolved					
Degree of satisfaction* with complaint process	-	6.7	6.2	5.1	6.2
Degree of satisfaction* with how things turned out	-	8.1	8.0	8.3	8.0
Num. of hholds not comp. satisf. with how things turned out	-	3	49	3	54
As % of households with problem resolved	-	37.5	54.4	42.9	51.4
Reason for not taking any other action for those who were not comp. satisf. with how things turned out and problem resolved (in percents)					
Not worth time or effort	-	33.3	36.7		35.2
Did not think it would help	-		10.2	33.3	11.1
Did not know what else to do	-	33.3	10.2		11.1
Thinking about taking some action in the future	-		4.1		3.7
Realized I was mistaken	-				
Fin. instit. explained its policies but situation still not satisfactory	-		4.1		3.7
My spouse, friend or relative is handling the issue now	-		4.1		3.7
The problem was resolved	-		26.5	33.3	25.9
No response		33.3	4.1	33.3	5.6
Number of households that did not know what else to do					
For those still pursuing problem	-	-	-	-	-
For those with problem left unresolved	-	2	2	-	4
For those with problem resolved	-	1	5	-	6
Total number of households	-	3	7	-	10
Percent. of households that did not know what else to do (As percent. of all households with a problem (n=166))	0.00	1.81	4.22	0.00	6.02

* 0 being "not satisfied" and 10 being "very satisfied"

contacted either a BBB or a lawyer about legal action as the third step in the complaint process. Since we know that all of these respondents at some point contacted a third party, and 54.5% did so in either the second or third step, we can conclude that almost half of these respondents are taking at least a fourth step in the complaint process. Although we were not able to calculate the sequence of steps after the third step, we were able to estimate the total number of different actions taken. Ninety percent of all respondents that contacted a third party took at least four diverse steps in the complaining process (Table 4). Furthermore, we were also able to determine whether respondents that took a third party action during the second or third step in the complaint process continued to take other actions. Of these 6 households, 5 proceeded to take other actions even after contacting a third party.

Not only is it important to know the action and sequence that consumers with credit card problems took in order to resolve their problem, but the tenacity with which they pursued the problem. Of all respondents with a problem that took action, 62% took a second action while 46% took a third action. Consumers that took a private action were the least likely to continue taking actions in order to resolve their problem. Fifty five percent of this group took a second step and only 22% took a third step. Respondents that voiced to seller maintain almost the same pattern as the overall sample of respondents with a problem that took action; 62% took a second step while 46% took a third action. Again, the most interesting result is for those that took a third party action. These respondents all took a second and third step and, as explained earlier, ninety percent took a fourth step as well. Three of these households even contacted a third party on more than one occasion. Therefore, it appears that even after complaining to a third party these consumers were still not satisfied.

Consumers using third party mechanisms invested more hours in resolving their problems (7 hours, compared with 3 for those voicing to seller and 2 for those taking private actions) and pursued their problems over a longer span of time (4.5 months, compared with 2 for those voicing to seller and 3 for those taking private actions). In part, this time spent may be a reflection of the fact that using a third party is a second or third step in the complaining process and people using third parties had already invested time in prior complaint activities.

Although less than 4% of the consumers with a credit card problem took no action, it is of importance to know why. The two main reasons for not taking any action were because they did not think that it was worth their time or effort or because they did not think it would help.

While we did not ask consumers how they implemented the steps in their complaining process, we did ask about their preferences for how to register a complaint (Table 6). By far, the preferred method was for a toll-free phone number; this result held across all categories of complaining actions (ranging from 82% to 100%). The second-most preferred method for complaining, however, seems to depend on complaint experience. Among those with problems as well as those who voiced to sellers, their preference is to complain in person or via e-mail (42%). Those who took a private action preferred to complain in person (63%), while those who used third parties preferred to use regular mail (64%). It may be that those with third-party experience realize that they may need to send in documentation for their complaint and already have an expectation of using the mail.

Outcomes

Arguably, the most important issue in the consumer compliant process, at least from the point of view of the consumer, is the final outcome of the complaint. Of the 166 consumers with a credit card problem, 9% were still pursuing the problem, 27% had a problem left unresolved, and 63% were able to resolve the problem (Table 9). Looking at the rates of resolution by type of action presents a different picture. The six respondents who took no action had their problem left unresolved. Of the 18 respondents that took a private action, 8 had resolved their problem while 10 said that their problem was left unresolved. Consumers that voiced to the seller present results similar to that of the whole sample of consumers with a problem (63% resolved). Respondents that took a third party action were either able to resolve their problem (63%) or were still pursuing the problem during the time the survey was carried out (36%).

Another result of the complaining process, for those who had money involved in the problem, is whether or not they were able to recover any amount of money. Four-fifths (82%) of consumers had some amount of money involved in their complaint (Table 5). In total, these consumers reported that they had \$121,000 involved in their complaints. Among those who had money involved in their complaints, half recovered some or all of their money. However, the amount recovered by these households totaled \$19,155, or only 15 percent, of the money involved. Of those that recovered some amount of money, consumers that complained to a third party or the seller recovered all, or substantially all, of their money (100% and 84%, respectively).

The Surveys of Consumers also asked questions regarding a consumer's satisfaction with the complaint process. Since the outcome of the complaint (i.e. whether or not the problem was resolved or is still being pursued) is arguably related to a consumer's overall satisfaction with the process, we explored the degree of satisfaction in the complaint process by final outcome of the complaint (see Table 9). Consumers that were still pursuing the problem and that had taken a third party action were the most dissatisfied with the complaint process, with an average satisfaction rate of 1.3 out of 10. However, since these individuals are still pursuing the problem, it is possible that once the final outcome is known, their degree of satisfaction might change.

Consumers with problems left unresolved were more dissatisfied than those with their problems resolved both in terms of the complaint process (2.7 versus 6.2 out of 10, respectively) as well as how things turned out (3 versus 8, respectively). Among those with the problem left unresolved, those who took private action were more satisfied than those who voiced to seller. Of this same group, 50% of consumers who took private action and 86% of consumers who had voiced to seller were not completely satisfied with the final outcome. When these respondents were asked why they took no other action since they were not completely satisfied with the outcome, the respondents gave different answers depending on the type of action taken on the problem. For consumers that took a private action, not knowing what else to do was the main reason for not taking any other action. On the other hand, respondents that had voiced to seller believed that the problem was not worth their time or effort or that taking another action would not help.

Among consumers that were able to resolve their problem, the consumers that had taken a third party action were the least satisfied with the complaint process (5.1 out of 10) but were the most satisfied with the final outcome (8.3 out of 10). Because we know that these respondents pursued the most "aggressive" actions and on average spent more time to resolve their problem, it makes sense that they would be the least satisfied with the process itself. On the other hand, consumers that had voiced to seller were the most dissatisfied with the final outcome. More than one half of the consumers that had resolved their problem and had voiced to seller were dissatisfied with how things had turned out. The main reason for why they had taken no other action was because it was not worth their time or effort.

Another way to analyze a consumer's overall satisfaction with the credit card or financial institution is to look at their exit rates by type of resolution (problem resolved, problem unresolved, still pursuing problem). Of the 16 households that were still pursuing the problem, 56% had exited. As might be expected, respondents that said that their problem was left unresolved were the most likely to exit; 66% of these 45 households exited. Even households that reported to have resolved their problem show high exit rates. Of these 105 households, almost one half exited.

From a policy perspective, it is also important to address the consumers who did not know what else to do during their complaint process. Of the 166 respondents with a problem, 10 respondents at some point answered that although they were not completely satisfied with the way things turned out, they did not know what else to do as part of the complaint process. Of these 10 respondents, 6 of them had resolved their problem while 4 had not. It is interesting to note that none of the respondents at the two ends of the spectrum, those that took no action and those that took a third party action, stated this as a reason for either not pursuing any action or further action.

DISCUSSION

Our survey found that less than one out of six households reported having some sort of credit card problem within the past 12 months. This seems low relative to the findings of other studies, but may be in line with problem rates associated with other financial products and services.

Of those that reported having a problem, very few people did nothing (only 4% were "loyal" in Hirschman's typology). This is very contradictory to other complaint data that show that only a small proportion of people with problems bothers to complain, although it is consistent with complaining behavior studies in competitive industries. In part, this may be due to consumers' high level of dissatisfaction (recall that the median level of dissatisfaction was 7 on a scale of 0 to 10); the more dissatisfied consumers are, the more likely they are to do something. It may also be due to the dollar amounts at stake or because complaining when a credit card is involved is relatively easy. For example, the Fair Credit Billing Act allows consumers to withhold amounts in dispute until the dispute is resolved, so the cost to consumers is relatively easy to bear.

As with other studies, we found that few people, about 7%, used third parties. Thus, for state and federal policy makers, this means that even a few complaints represent a lot of people with problems.

Unlike other studies, we found high exit rates; 91 out of 166 respondents (55%) indicated they stopped using the card or the financial institution. Interestingly, 100% of those who complained to third parties also exited; 83% of those who took a private action also exited; and half (50%) of those who complained to the seller (the credit card issuer or point of sale) exited. It may very well be that these high exit rates are characteristic of the credit card market in general. This market is highly competitive and information about other cards often comes to the consumer in the form of mail solicitations and advertising. Consumers may be so well-informed about their other options and choices that entry and exit is made quite easy. For businesses in this competitive industry, the bottom line is to realize that even if problems are solved, there is a high likelihood that consumers will switch providers.

It appears that consumers are responding to a cost/benefit analysis of complaining. That is, consumers who were more dissatisfied and who had more money at stake pursued the more assertive behaviors (voice to seller, use third party), even though these actions took more time. Consumers who used third party mechanisms reported spending the most time, both in terms of hours spent resolving the problem and overall elapsed time spent on the problem. However, these third party complainants also tended to recover a higher proportion of the amounts involved in their dispute (recall that people complaining to third parties had the highest dollar amounts involved in their disputes).

For consumers, the apparent complaining hierarchy is 1) go to the seller, 2) stop using the card (i.e. exit) and 3) stop using the institution (also exit). We found that using a third party is generally a third or fourth step; everyone in our study that used a third party had taken other steps prior to contacting a third party. It is clear that only the tenacious make it to this point.

Another interesting observation is that

although 54 percent of the respondents that took a third party action contacted the credit card issuer as the first step in the complaint process, they did not do so to the same degree as the respondents that voiced to seller. These respondents were four times more likely than those that had voiced to seller to report that they had stopped using the credit card in question as their first step in the complaining process. This could actually have made the complaining process longer since in many instances a problem, such as a billing error, cannot be resolved by merely discontinuing the use of the credit card.

Confirming the results of others, we find that consumers whose problems have been resolved were more satisfied with the complaining process and with the outcome of their complaint. For three groups of consumers - those taking no action on their problems, those not completely satisfied with their outcomes, and those not pursuing an unresolved problem further-- the most common reasons for not taking further action were that they did not think it was worth the time or effort or that further efforts would help.

Although consumers that had resolved their problems were more satisfied with the complaint process and with the outcome of their complaint, it is important to note that one half of these households still exited. Therefore, solving the problem is not a guarantee that the consumer will continue to use the card or the financial institution. Due to the competitive nature of this industry, credit card companies might have to make a greater effort to try to salvage the customer relationship

SUMMARY

This study has focused on describing the complaining behaviors of consumers, using credit cards as a case study. We found that problems were not as prevalent as shown in other studies but that reported complaining behaviors were substantially higher than other studies. Consumers in our study were much less likely to do nothing and much more likely to exit than those in other studies. We found that consumers tend to voice to the seller but that they often follow up with either exiting or using a third party. We found that a substantial proportion (63%) had resolved their problems and an additional 10% were still in the complaint-resolution process.

Because our descriptive findings are so contrary to those found in the literature, they seem to raise more questions than they answer. To what extent do our findings reflect the particular marketplace of the early 21st century? Do they simply represent the highly competitive credit card marketplace, or are they indicative of other consumer markets? If the former, what other such competitive markets may show similar findings with respect to complaining behaviors?

In the future, a more integrated analysis is needed within a multivariate framework to better understand the interrelationships among some of the characteristics of the consumers in our data set and to address the above questions.

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DISCLAIMER

The analysis and conclusions set forth in this paper represent the work of the authors and do not indicate concurrence of the Federal Reserve Board, the Federal Reserve Banks, or their staff.

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CONSUMER GRUDGEHOLDING: TOWARD A CONCEPTUAL MODEL AND RESEARCH AGENDA

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ABSTRACT

The topic of consumer grudgeholding has received limited attention in the marketing and consumer behavior contexts. The act of holding a grudge is one of great importance because it describes what seems to be an irrational, intensely emotional behavior or set of behaviors on the part of the consumer, yet the behaviors associated with grudgeholding can have devastating effects on the marketing entity. Any member of the marketing channel, including product and service marketers, retailers, and advertisers, may lose a customer while receiving little reason why, or while being subject to negative word-of-mouth or other retaliatory measures. The current research offers a conceptual model of the consumer grudgeholding response, incorporating established theoretical research such as attribution, coping, voice and exit, perceived justice, consumer loyalty, and complaining behavior. A detailed model of grudgeholding behavior is presented with an agenda for future research.

INTRODUCTION

The interaction between a marketer and each of its customers exists "to establish, maintain, enhance and commercialize customer relationships so that the objectives of the parties involved are met. This is done by a mutual exchange and fulfillment of promises" (Gronroos, 1990, p 5). Peterson adds that the definition of relationship marketing will emphasize the "development, maintenance, and even dissolution of relationships between marketing entities, such as firms and consumers" (Peterson 1995, p 279)

One form that the dissolution of a marketing relationship takes when a promise is not fulfilled is that of consumer grudgeholding. The act of holding a grudge conveys the visual image of an embittered individual, standing with back turned to avoid the offending object, arms crossed into an impenetrable barrier to communication. Grudgeholding might be considered to be overly emotional, irrational, and counterproductive to everybody except for the person holding the grudge. To the consumer who is experiencing dissatisfaction, grudgeholding is an emotion-driven attitude, a coping response to a breach of faith. Such a response may seem to be perfectly justifiable and appropriate given the grievance held by a customer against the object of the grudge.

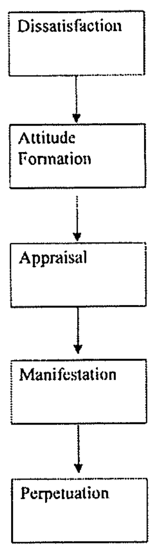
From the marketer's perspective, grudgeholding represents a profoundly dysfunctional relationship with a past, prospective, or even current customer, a customer who may have removed himself or herself from any possible marketing communications, and who may have banished the offending marketer to his or her rejected set, barring consideration of any future relationship. A better understanding of grudgeholding and how this response develops is necessary, particularly given the growing importance of deepening and enduring relationships with customers.

RESEARCH OBJECTIVES

The main objective of this research is the presentation of consumer grudgeholding as a distinguishable coping response, one that begins with a consumer's experience of a dissatisfying outcome to an aspect of the consumer-marketer relationship. For grudgeholding to occur, this outcome must provoke an intensely strong negative emotional reaction, a "flashpoint" that is followed by the formation of a negative attitude toward the marketer and then, either immediately or at a later time, by an appraisal of possible responses to the negative outcome.

The current research will focus on the factors influencing the bearing and perpetuation of the grudge, including the role that the marketer plays in meeting or failing to meet the consumer's demands for redress. Finally, an agenda for continuing research will be introduced with a focus on the implications for marketers. The framework of the proposed grudgeholding process is illustrated by Figure 1.

Figure 1
Framework of the Proposed Grudgeholding Process



These research objectives will be pursued by integrating the innovative yet infrequent research on grudgeholding with research in related areas. These areas include work on complaining and redress seeking, consumer exit, and consumer loyalty. This approach is intended to take the study of consumer grudgeholding, introduced by Twedt and developed by Hunt (e.g., Hunt, Hunt and Hunt, 1988) and add a new dimension that will examine the consumer-held motivations and perceived functionality of the grudgeholding response.

GRUDGEHOLDING DEFINED

The dictionary definition of a grudge is "a strong, continued feeling of hostility or ill will against someone over a real or fancied grievance" (Guralnik, 1980, p. 619). Wixen (1971) offers a psychoanalytic perspective, presenting grudgeholding as a phobic avoidance of the offending party, enacted to preserve the grudgeholder's self-esteem. The elements of this definition hold true for the adaptation of the concept of grudgeholding to the realm of consumer behavior. The strong and negative emotional reaction experience by the consumer might be called a flashpoint that provokes avoidance behavior against the marketer.

Clearly, grudgeholding is about as far from a case of consumer satisfaction as one can imagine, yet it is not as simple as an extreme case of dissatisfaction (Francis and Davis, 1990). A grudge is defined in the marketing context as an extreme exit (Hunt, Hunt, and Hunt, 1988; Hunt and Hunt, 1990), persisting over a long period of time (Huefner and Hunt, 1992). Grudgeholding is not dissatisfaction, it is an attitude formed as a coping response to the above-mentioned flashpoint,. This attitude may last for a moment or for years. It may provoke avoidance at all costs, or until the consumer realizes that avoidance is impossible or impractical. The importance of consumer grudgeholding is not only in the length of the grudgeholding, but in the affective, cognitive, and behavioral responses of the consumer while the grudge is being held.

The motivation for grudgeholding and the offended customer's behaviors during the course of holding a grudge warrant the following integration of the definitions of consumer grudgeholding:

> Consumer grudgeholding is a negative attitude toward a marketer, distinguished by the persisting and purposive avoidance of the marketer (e.g., vendor or group of vendors, brand, product class, or organization) and possible other actions against the marketer as a means of coping with a real or perceived grievance attributed to the marketer.

Grudgeholding begins with the emotional

flashpoint leading to the formation of a negative attitude, driven by the emotion involved in the dissatisfying experience. Then, appraisal of the coping alternatives and the behavioral manifestation of the grudgeholding attitude will occur, leading to the grudgeholding response over some time frame.

While the above makes grudgeholding seem like a detailed process, it does not reflect the experience of grudgeholding, The negative attitude would be driven not by the usual three components (affect, behavior, and cognition), but primarily on the basis of the strong negative affect (e.g., Eagly & Chaiken, 1993). The subsequent appraisal of alternatives does recognize a cognitive element to grudgeholding, but this appraisal may occur immediately (e.g., "I have to get out of here") or it may not occur for some time after the flashpoint occurs (e.g., "the store still refuses to correct their error, I will never go back there again").

It is important to note at this point what grudgeholding is not. Consumer grudgeholding is not merely another way to say consumer dissatisfaction; in fact, grudgeholding is one of the possible emotional and attitudinal consequences of dissatisfaction that may include responses such as complaining, avoidance behavior, negative word-of-mouth, or the enlisting of an outside agent to bring about a desired change.

Just as there are several other responses to dissatisfaction beside grudgeholding, there are a number of reasons that a consumer might decide to withdraw from a relationship with a marketer on a temporary or permanent basis. A shopper might elect to buy one brand over another or to enlist the services of one vendor instead of his competition. Recall that the definition provided above states that grudgeholding is done with a purpose, and that purpose is to cope with a wrongdoing on the part of a marketer. Of course, there are other reasons for exit or avoidance behavior, such as variety-seeking, unavailability of a product (such as stock-outs or a long wait for an appointment), or the purchase of one product or service at the expense to another because of a discount or other form of promotion. Exit or avoidance without the strong negative attitude would not fit the definition of grudgeholding. There are other ways to express dissatisfaction than exit behavior too, such as complaining or enlisting an outside agent to bring about a desired change. As proposed by the above definition, consumer grudgeholding is persisting and purposive, and results in the avoidance the object of the grudge. The next section will present the past research on grudgeholding.

THEORETICAL BACKGROUND

The seminal research that provides the background for the study of grudgeholding is that of Hirschman and of Hunt. Hirschman distinguished two broad responses to a situation that is deemed unacceptable: exit and voice. These responses were considered in several contexts, including commercial, social, political, and organizational. According to Hirschman (1971, p. 4):

> Some customers stop buying the firm's products or some members leave the organization: this is the *exit option.* As a result, revenues drop, membership declines, and management is impelled to search for ways and means to correct whatever faults have led to exit.
>
> The firm's customers or the organization's express their dissatisfaction directly to management or to some authority to which management is subordinate or through general protest addressed to anyone who cares to listen: this is the *voice option.* As a result, management once again engages in a search for the causes and possible cures of the customers' and members' dissatisfaction.

Hirschman presents the above options as members of two different realms. Exit is an economic option, pragmatic and enacted when voice is not perceived to be an alternative, or the cost of expressing voice is expected to be too high. In contrast, voice is a political approach, enacted when exit is impossible or costly, or when the offended party retains hope of maintaining a relationship with the offender. Hirschman presents both exit and voice as considered responses based largely on a cognitive, situational appraisal.

Both exit and voice are means of coping with a deteriorating and unacceptable situation. Hirschman's approach is based on cognitive appraisal, and there is certainly a cognitive element to consumer dissatisfaction. Sirgy (1980) defined dissatisfaction in terms of the differences between expected (or deserved) outcome and the perceived actual outcome of an encounter, which involves cognitive appraisal. Yet Sirgy also defined dissatisfaction as "an emotional state resulting from (the) widening of the perception-cognition discrepancy" (Sirgy, 1980, page 45).

It follows that grudgeholding, recognized as "extreme exit" (Hunt and Hunt, 1988), containing elements of voice and exit (Wright and Larsen, 1997), and of emotion and appraisal, is also a coping response. (e.g., Folkman and Lazarus, 1985). The inclusion of grudgeholding as a coping response seems intuitive, and yet this integration of the research has not been pursued until now.

The emotional elements of grudgeholding were later added to the research stream, largely by the work of Twedt and Hunt. Twedt is credited by Hunt with introducing the term "consumer grudge-holding" to the marketing literature (Hunt, et al., 1988), and the work of Hunt offered several variables for consideration. Specifically, Hunt found that grudges tend to be held when a consumer becomes emotionally upset due to product performance (moreso than due to service performance), and result from infrequently made purchases (compared to more frequently made transactions). Hunt also found that grudges tend to be fairly long in duration and are more often held by older consumers than by teen-aged or college-aged consumers (Hunt, et al., 1988; Hunt and Hunt, 1990).

Grudgeholding was also explored in detail by Wright and Larsen (1997). Wright and Larsen examined grudgeholding in the context of an passionate audience's response to the rejection of their favorite college football team (Brigham Young University) by college football's Alliance Bowl Coalition, which selects the teams that will play in post-season football games. The disappointed and angry fans demonstrated numerous manifestations of the grudgeholding response. The Wright and Larsen example is illustrative of the nature of grudgeholding, for which there is an emotional response, and there is avoidance, but the persistence of the grudgeholding and the way in which a grudge is carried out is something that can vary depending on personal and environmental factors. The expression of grudgeholding will be discussed in a later section. The next section will present the elements of the grudgeholding response.

ELEMENTS OF THE GRUDGEHOLDING RESPONSE

The grudgeholding response is composed of several elements that occur in a sequence, although the elapsed time between steps in the sequence might be minimal. Preceding grudgeholding is the necessary experience of customer dissatisfaction. This dissatisfaction provokes a grievance felt toward the marketer by the consumer, and this emotional reaction that provokes the grievance can be labeled as a flashpoint.

The immediate coping response by the consumer may be a quick verbal response, a call for the store manager, even an immediate exit, yet the response of the marketer or environmental factors may mitigate or prevent the formation of the negative attitude. Next comes the consumer's assessment of the situation and the possible coping responses, including the possibility of holding and sustaining a grudge. A grudgeholding response can come in one or more of a variety of forms, and can subside quickly or continue indefinitely, and these factors are mediated by the marketer's response and changes to the consumer's situation or marketing environment. To summarize, once dissatisfaction is experienced, consumer grudgeholding unfolds over several steps:

Flashpoint and Attitude formation
Assessment
Manifestation
Perpetuation

Each of these steps is discussed in greater detail below.

Flashpoint

Literally, a flashpoint is the lowest temperature at which a volatile substance will ignite, hence the metaphor describing the moment at which a consumer realizes that his or her grievance has become intolerable, perhaps irreparable, and in need of a response. While the term flashpoint is derived from the natural sciences, it can be adapted for use in the current context of consumer psychology as it relates to customer dissatisfaction. In fact, the notion of an emotional flashpoint has been used in other situations not related to the natural sciences:

> "When confronted, we want to give a defense. When criticized, we can hardly wait to set the record straight. And when wronged, we want to take the first opportunity to advance the argument for our cause. Anything but listen.... Flashpoints tempt us to make a quick verbal response." (Dresselhaus, 2001).

The current research introduces the term flashpoint into the customer satisfaction and dissatisfaction literature, and there are several related issues to be considered for future research. For example, just as different substances have different flashpoints, there may be personality variables that influence at what point a customer experiences an emotional flashpoint and decides to hold a grudge. Also, in which situations will a single event ignite a flashpoint, versus the accumulation of events until the customer suffers, to use another metaphor, the straw that breaks the camel's back.

No matter what the circumstances leading to the flashpoint and the intense negative emotional reaction may be, this affect motivates the customer to form a negative attitude toward the offending party. The nature that the grudgeholding response takes is the subject of the consumer's assessment of his or her situation, discussed in the next section.

Assessment

Following the initial exit or avoidance response comes the maligned consumer's attempt to cope with his or her situation and, more specifically, the assessment of the coping responses available. While grudgeholding involves avoidance behavior by definition, this avoidance might be for an extended time or only for a limited duration. The factors that influence the assessment of and the response to a situation are many, and can include personality variables such as a state versus action orientation (e.g., Kuhl, 1981); locus of control (e.g., Folkman, 1986), complaining threshold (Kowalski, 1996), even paranoia (e.g., Wixen, 1971). All of these factors must be included in the agenda for future study, but for the purpose of the current research, the focus will remain on the factors related to the relationship between the consumer and the marketer.

The decision to expend the cognitive and emotional effort involved in grudgeholding, and the specific nature of this response are functions of several factors, including the attribution of blame for the situation and the consideration of the outcome desired by the offended party (and the perceived likelihood of the outcome being realized through the grudgeholding response). Also considered at this stage are the perceived costs involved in grudgeholding. These costs can be grouped into two broad categories: the cost of exiting the relationship (by leaving one consumer-marketer relationship in favor of forming one with some competitor) and the cost of expressing voice (generally in the form of complaining). In addition, the consumer's attitude toward the enactment of the possible responses must be considered.

An important, preliminary step in the consumer's assessment of his or her state is the attribution of blame for the current situation. Just as the outward attribution of blame is a prerequisite for complaining behavior (e.g., Folkes, 1984, Blodgett and Granbois, 1992, Singh and Wilkes, 1996), it is also a necessary factor preceding grudgeholding behavior.

Another factor involved in the grudgeholding process involves the consumer's desired outcome of the consumer-marketer interaction. Just as complaining behavior is goal directed (e.g., Singh and Wilkes, 1996), the entire grudgeholding process is meant to achieve an end. A difference between complaining, which may or may not meet the criteria of grudgeholding behavior (e.g., it might not be persistent), and grudgeholding is that the goal of holding a grudge may range from a refund of the money spent on a product or service to, at an extreme, the hopes that a company will go out of business (but not before paying vast punitive damages for the trouble it has caused). However, desired outcomes can also include factors that preclude complaining, such as avoidance of or protection from a relationship with a marketer. For example, a homeowner might protest the construction of a gas station or fast-food restaurant that she feels was built too close to her property by steadfastly avoiding that merchant.

As suggested above, there are costs to grudgeholding behavior, such as the cost and effort involved in exiting a relationship. This can range from the inconvenience of consciously avoiding a particular marketer to higher costs such as the termination of an existing relationship and the effort needed to begin a new one. Other barriers to exit exist, including the sacrifice of points or credits earned through an affinity program such as a frequent flyer or frequent shopper plan, even foregoing the use of an already-purchased product. Complaining also requires conscious effort, and may be met with indifference or the denial of a desired level of customer service. It might simply be against one's nature to complain. This is an important factor in considering the dissatisfied consumer's assessment of his or her possible responses, and the costs therein: the consumer's attitude toward particular behavior (and not just toward the marketer).

The relationship between the consumer's attitude toward grudgeholding responses is moderated by the effort needed to enact such behavior (e.g., Bagozzi, Baumgartner, and Yi, 1992). For example, it might simply take less to drive some people to complaining behavior than it does others, who perhaps do not like confrontations and are thus less likely to complain. Kowalski called this the complaining threshold (Kowalski, 1996). Also, some people simply do not want to give up their use of a familiar product or service, and will maintain a dissatisfying relationship if the costs of ending it are deemed to be too high, or the likelihood of meeting their goals are deemed too low. Research has shown that the attitude toward a behavior is a function of the related outcomes and their likelihood of occurring (e.g., Ajzen, 1985). A dissatisfied consumer's attitude toward grudgeholding behaviors, and the perceived costs of such responses, can therefore influence their attitude toward the grudgeholding response.

Part of the assessment aspect of grudgeholding is the comparison of the costs to the benefits of grudgeholding. One benefit is, of course, gaining a just and equitable response to one's grievance. Holding the grudge might give one a feeling of power, in that by steadfastly refusing to do business with the offending marketer, the customer is denying income to the object of the grudge. Gaining some measure of vengeance may also be a desired end. There is a German word, *Schadenfreude,* that refers to deriving pleasure from the suffering of others. This might be another perceived benefit of holding a grudge.

While holding a grudge a consumer must therefore engage in some cognitive appraisal of the likelihood that their behavior actually will lead to that outcome, and that the benefits will outweigh the costs. As research on complaining suggests, a response must be considered to have a high likelihood of success, whether success is measured as gaining a refund, punishing a marketer, or protecting oneself or others from future harm. (e.g., Blodgett and Granbois, 1992; also Singh and Wilkes, 1996 offer a comprehensive review of theories related to complaining behavior). Otherwise, the costs to engaging in grudgeholding behavior might outweigh the benefits expected. Of course, that is just the rational perspective. The emotions propelling a grudgeholding response might very well blind the grudgeholder to the costs he or she may have to bear.

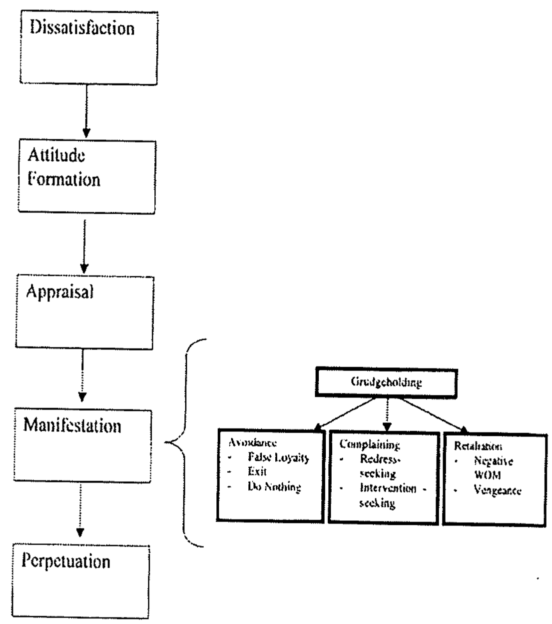
In this section, the different factors influencing the assessment of a dissatisfying and potentially grudge-inducing consumer-marketer relationship were explored. This assessment may be spur-of-the-moment or carefully considered, and if the decision is made to engage in grudgeholding behavior, the next question before the consumer is that of which specific actions to take. The manifestation of consumer grudge-holding is the topic of the next section.

Manifestation

As the model presented in Figure 1 progresses past the assessment of responses to engaging in a particular behavior or set of behaviors, a crucial decision that the consumer must consider at this point is, if grudgeholding is deemed worthwhile, how to enact this decision. The manifestation of the grudgeholding response will be considered in this section.

The model of the grudgeholding process is expanded in Figure 2 to include the variety of behavioral responses that a dissatisfied consumer may demonstrate. These responses have been grouped into three categories: Avoidance, Complaining, and Retaliation.

Figure 2
Consumer Behaviors Representing the Manifestation of Grudgeholding



As suggested throughout this research, the most familiar manifestations of consumer grudgeholding behavior are complaining and exit (which is included in the avoidance category). Wright and Larsen (1997) found many different manifestations of voice and avoidance behaviors in their research on fans' reactions to the rejection of Brigham Young University's (BYU) football team's by college football's Bowl Alliance. There was a particular post-season game, the Tostitos Fiesta Bowl, that the BYU fans felt was the rightful destination of their favorite team. With the rejection, a Tostitos chip-burning was organized to protest BYU's exclusion from the football game that Tostitos sponsored. Some fans suggested boycotting all business related to the slight: Tostitos; Frito-Lay, which markets Tostitos; PepsiCo, Frito-Lay's parent company; ABC Television, which televised the game; and the other Bowl games arranged by the Alliance.

It is important to note the wide variety of grudgeholding manifestations that occurred. The goals of the grudgeholding behaviors ranged from a desire to enjoy the aforementioned *Schadenfreude* to making the offending parties "feel as guilty as possible" (Wright and Larsen 1997, p. 178). One informant vowed that he was "throwing out my Tostitos" (p. 179) while others urged their senators to involve the Justice Department and the Federal Trade Commission in their dispute. Grudgeholding does not necessarily signify the end of all future commercial relationships between a consumer and the object of the grudge. One fan allowed for the eventual relinquishing of the grudge by admitting that "we may slip up someday" (p. 180), and another promised "to eat bags full (of Tostitos) if they repent." (p. 180). To include stories such as these as examples of the grudgeholding response is noteworthy, in that it suggests that a grudge might not be held forever, but rather may be held over a short- or long-term period during which the grudgeholding behaviors such as avoidance are exhibited. Of course, holding a grudge is only one of several possible responses to consumer dissatisfaction, or to be more precise, one of several ways in which the dissatisfaction might be expressed. Again, the key determinants of grudgeholding behavior remain the persistent and purposive nature of the behaviors.

Many of the responses included in the framework, such as redress-seeking, complaining, negative word-of-mouth, and exit behavior have been the topics of extensive research, and the current research presents them in the grudgeholding context. The focus of this section therefore will turn to two subjects that have been less frequently considered: false loyalty (part of the avoidance category) and vengeance (from the retaliation category).

Jones and Sasser (1995) presented the topic of false loyalty, which can be misinterpreted by marketers as genuine loyalty borne of customer satisfaction. This is similar to what Dick and Basu (1994) called "spurious loyalty," which can also be mistaken for loyalty due to customers' high level of repeat patronage despite a low relative attitude toward the marketer. Similarly, false loyalty comes about when a firm's customers stay with the marketer because they have little or no choice. Regulatory limits to competition, high switching costs, proprietary technology, and affinity programs can all serve to effectively make a customer bound to a particular marketer (Dick and Basu, 1994; Jones and Sasser, 1995). Such customers are referred to as "hostages," forced to accept "the worst the company has to offer (Jones and Sasser, 1995, p. 97) because of the monopolistic status that the marketer enjoys.

While these customers might be viewed from a marketer's executive offices as loyal customers, Jones and Sasser found that once competition is introduced (due to deregulation, reduced switching costs, the expiration of patents, or the expenditure of affinity points) customers that are not completely satisfied tend to act like non-loyal customers in competitive marketing environments. Furthermore, it follows that customers that have been dissatisfied or feel abused while held at a disadvantage by the marketer may very well flee from the marketer at the first opportunity, exhibiting grudgeholding behavior because they finally can.

Vengeance, like redress-seeking, illustrates that while a consumer may be engaging in grudgeholding behavior, there may still remain interaction between the consumer and the marketer. Vengeance is a form of retaliation and is an extreme manifestation, which may be in the form of threats or lawsuits against the object of the grudge. It may also take the form of venting one's frustrations via the Internet, through the establishment of or participation in an online hate community (e.g., untied.com, a community hosting complaints against United Airlines or sucks500.com, hosting complaints against many corporations). Phenomena such as "hotel rage" (Drucker, 2001) illustrate how over-stressed and low-threshold customers may lose all sense of decorum and engage in vengeful and even destructive behavior. In fact, such customers have been labeled as "disruptive," given their negative attitudes and negative behavior toward the marketer (Rowley and Dawes, 2000). These types of behaviors may be meant as vehicles for seeking redress or equity is response to a dissatisfying transaction, but may also be punitive in nature or intent, motivated by the desire to cause damage to the offending marketer.

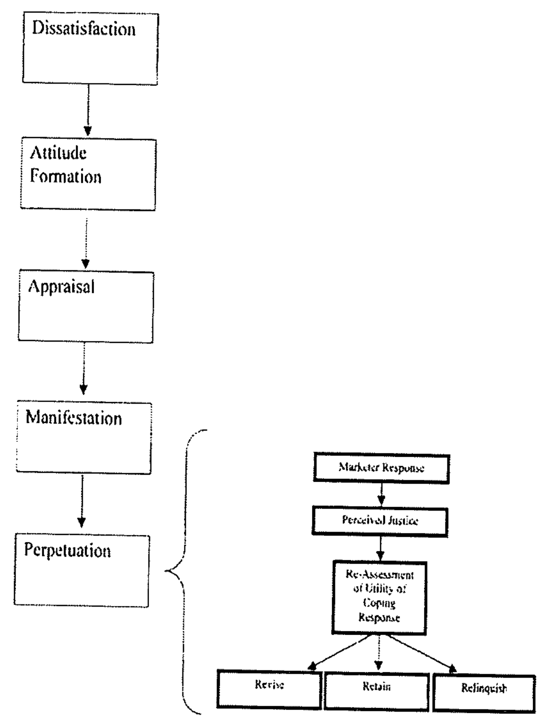
To summarize, there are a variety of consumer responses to a dissatisfying relationship with a marketer. To meet the criteria of grudgeholding behavior, the response must be persistent and purposive, in hopes of coping with the discrepant consumer-marketer environment. When these criteria have been met, the marketer will be in the precarious position of recognizing and coping with the consumer's potentially silent response from the of avoidance group, the possibly destructive response from the retaliation category, or any other voiced complaint behavior. This leads to the next section, on the perpetuation of grudgeholding behavior.

Perpetuation

The next grudgeholding response is that of perpetuation. It is not until the grudge is manifest that the marketer can respond, and if the grudgeholding takes the form of silent avoidance, the firm may not even know that it has lost a customer or that its rival might have gained one. The marketer's attempt at recovery is a key to this stage, as is whether the customer feels that the response has been equitable and that the grievance has been resolved. Note that the response of the marketer can occur at any stage that has been described above. The marketer might intercede immediately, perhaps even before a customer complains. The marketer might respond to a verbal complaint or a letter written to a central office. The object of the grudge might even respond by ignoring the customer or contending that the situation is not the marketer's fault.

After the marketer's response, the grudgeholder might revise his grudgeholding behavior toward the marketer, maintain the current behavior or set of behaviors, or relinquish the grudge, allowing for re-established relations with the marketer. These response categories are presented in Figure 3.

Figure 3
Consumer Options Regarding the Perpetuation of Grudgeholding



A grudgeholding consumer may see fit to revise his selected coping response, while still maintaining a grudge against the marketer. Recall that there are several elements discussed above that can influence the assessment of coping responses. The environment surrounding the customer-marketer relationship can change over time, leading to a change in behavior. For example, if the competitive situation has changed due to new competition or deregulation, the cost of exiting a relationship would change too. Whereas at one point the cost of exit was high relative to the cost of voice (e.g., complaining), the addition of a new competitor, and a new option for the consumer, could conceivably lead the dissatisfied customer to stop complaining and simply move on to a new vendor. Another example involves the desired outcome and the perceived likelihood of a grudgeholding response bringing that outcome to bear. If a dissatisfied customer learns that other customers are also suffering from similar purchase outcomes, the likelihood of gaining a desired outcome (e.g., put the offending marketer out of business) will increase dramatically through the involvement of a legal or regulatory agency and a class-action lawsuit compared to before this knowledge became available. In either case, the grudgeholding attitude is maintained but the behaviors related to the grudgeholding have changed.

In the absence of new information or other environmental changes, a consumer may simply continue her current grudgeholding response. There are several possible reasons for this approach, including the customer's desire to gain closure for any action she might have taken, or to save face if she has made her dispute known to the public. Similarly, once our customer has made her dissatisfaction known to the marketer or any third parties, she might not want to seem hypocritical or weak-willed by relinquishing her grudge before the discrepancy has been resolved to her satisfaction..

Both the revise and the retain perpetuation strategies are bad news for the marketer, particularly if the coping strategy chosen is a voiceless one (e.g., the avoidance responses of exit or false loyalty; see Figure 2). After all, it is well-established that while many customers do not complain even when dissatisfied, those who do complain provide a service to the marketer by pointing out deficiencies in some aspect of the customer-marketer relationship.

If the customer remains attractive to the marketer, or if the consumer's grudgeholding behavior is creating problems for the marketer (e.g., bad publicity, lawsuits), then the marketer's ideal outcome would basically be for the consumer to relinquish the grudge and resume the relationship. If the consumer does complain and seeks redress for his or her distress, the speed and degree to which the marketer reacts can mean the difference between a recovered loyal customer and one that cannot be consoled. The recovery paradox (e.g., McCollough, 2001; see also Jones and Sasser, 1995) describes how, in the face of a discrepant situation, the marketer's prompt, equitable reaction to the discrepancy can leave a customer even more satisfied than before. Jones and Sasser (1995) cite one example in which one company won back 35% of its defecting customers by contacting them and listening to their complaints.

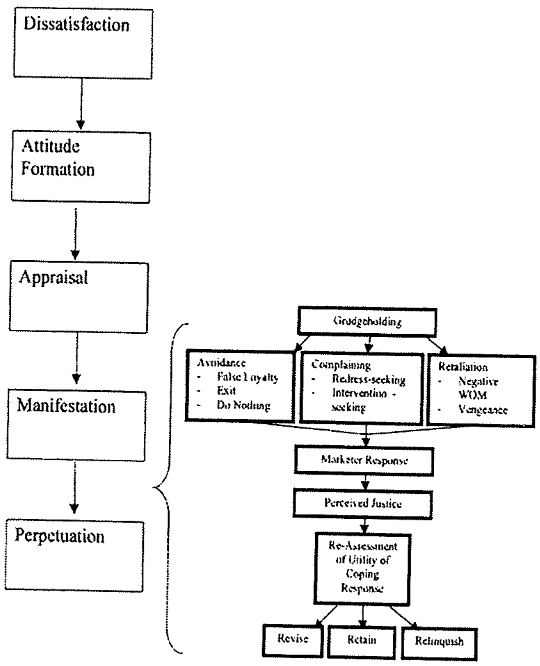
If the costs of holding the grudge become too high, the grudge may also be relinquished. This carries with it the risk that the customer remains dissatisfied and is only waiting for a reason to exit the relationship, exhibiting what was described above as false loyalty.

CONCLUSION

The objective of the current research has been to present a conceptual view of the consumer grudgeholding response. Grudgeholding is just one of many possible responses to consumer dissatisfaction, and the dissatisfying event or events may be viewed through a very subjective lens. If the negative emotion is intense enough to reach a consumer's flashpoint, igniting negative attitude, then grudgeholding may follow. The elements of the grudgeholding response are illustrated as an expanded framework in Figure 4.

The current research is intended to represent an advance in the study of consumer grudgeholding. Its anticipated contribution will be in the integration of grudgeholding research with research in related areas, providing a deeper understanding of consumer motivations for and manifestations of what might seem to be an otherwise irrational or dysfunctional behavior. Marketers will also benefit from understanding the concept of grudgeholding, a perspective of lapsed and lost relationships that will enable retailers, service-providers, and other marketers to heed the direct and indirect signals that a disgruntled customer might send.

Figure 4
Expanded Framework of the Proposed Grudgeholding Process



Managerial Implications

The current research has introduced a framework describing the grudgeholding process, but the question remains, what do the different types of grudgeholding responses mean to the marketer? There are several other variables that need to be considered before addressing this question, such as the importance of the product or service to the consumer, the purchase cycle for items in the particular product class, and, of course, the marketer's ability to recover from the customer's grudgeholding response.

A proactive marketer will also be interested in learning how to best negate the effects of grudgeholding and how to create a profile of customers that are prone to engage in different types of grudgeholding responses. This might represent a massive undertaking on the part of the marketer, but if customers who have exited, complained, or enacted other responses to dissatisfaction can be segmented by means of measurable attributes, the marketer can prepare specific communication programs, and recovery plans and policies designed to maintain customer satisfaction and effectively recover from dissatisfying episodes.

Future Research

Future research should consider the marketer-driven factors that affect the likelihood and characteristics of grudgeholding behavior. Furthermore, how does consumer grudgeholding influence a marketer's strategic and competitive goals, and what influences does it have on the marketing environment?

A conceptual overview such as this naturally leads to many other questions, thereby establishing a provocative research agenda. Other questions were raised in the above research that provide additional directions for future research:

> At what point does the accumulation of dissatisfying events surpass some threshold and result in the flashpoint and grudgeholding behavior? What is the nature of the threshold-surpassing interaction, compared to interactions leading up to that point?

> What other factors influence the assessment of and the response to a discrepant situation? These factors might include personality variables such as state versus action orientation (e.g., Kuhl, 1981); locus of control (e.g., Folkman, 1986), even paranoia (e.g., Wixen, 1971).

> The benefits realized from grudgeholding, and the variety of reasons for holding grudge, suggest that a categorization of the different types of grudgeholding responses is in order. Such a typology, examining the different motivations, different perspectives, and different implications of grudgeholding for

the consumer and for the marketer, also represents an important topic for subsequent research.

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THROUGH THE LOOKING GLASS: AN AGENCY THEORETIC FOUNDATION FOR THE SATISFACTION MIRROR

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Lester W. Johnson, Mt. Eliza Business School

ABSTRACT

We analyze the satisfaction mirror -- the positive but atheoretical correlation between customer satisfaction and staff/job satisfaction -- using agency theory in order to better understand the underlying mechanics of the mirror. We identify the front-line service provider as being the agent in two separate but related principal-agent dyads: the first with the customer, the second with the employing organization. This role in two simultaneous dyads, with one conditional on the other, both provides direction for strengthening the satisfaction mirror and also places upper limits on its potential strength.

INTRODUCTION

Heskett, Sasser and Schlesinger (1997) conceptualized what they called the "satisfaction mirror" (p 99) as a strong positive relationship between customer satisfaction and staff job satisfaction within the service environment. The existence of the mirror has to this point been demonstrated through correlational analysis, with correlations between overall customer satisfaction and overall job satisfaction reported in the range of 0.34-0.53 (Bernhardt, Donthu and Kennett 2000; Tornow and Wiley 1991). While the satisfaction mirror is intuitively appealing – the idea that a customer's satisfaction with a service reinforces the job satisfaction of the front-line service provider, and vice versa – a theoretical analysis of the underlying mechanics of the mirror has not been undertaken.

In this paper, we utilize agency theoretic concepts to understand underlying driving forces that can shape and limit the satisfaction mirror. Additionally, we apply agency theory to develop testable propositions regarding the mirror.

AGENCY THEORY AND THE CUSTOMER-STAFF DYAD

Consider the dyad of a single customer and his or her front-line service provider, with the customer taking the commonly assumed role of the principal, and the service provider as the agent. The customer (principal) requires the service provider (agent) to perform some service on the customer's behalf – the classical principal-agent problem (e.g., Eisenhardt 1989). The customer expects from the service provider a specific outcome to the customer's service requirement, said outcome to be the service resolution: if there is a problem, the customer expects it to be fixed; if there is an opportunity, the customer expects it to be taken.

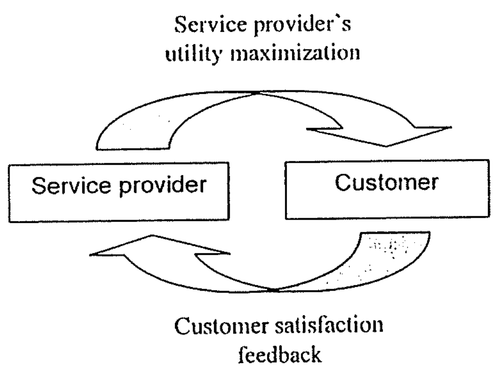
MORAL HAZARD

The problem of moral hazard arises when the customer believes that adequate delivery by the service provider is uncertain because of possible lack of effort and therefore that working with the service provider is risky. In these instances Pareto-optimal risk sharing, a state in which any change to it that would make one party better off would make the other party worse off, is generally precluded as it will not motivate the service provider to take customer-perceived appropriate action. Instead, only a second-best solution, which trades off some of the risk-sharing benefits for motivation, can be accomplished. While optimal levels of satisfaction for both the customer and service provider cannot therefore be simultaneously achieved, the opportunity still exists for efficiency gains – or increases in satisfaction – to be achieved by one or both parties (see Figure 1).

IMPERFECT INFORMATION AND ASYMMETRY

The source of this moral hazard in the customer-staff dyad is information asymmetry that results because each party is unable to observe and thus have an identical understanding of the other's actions. To overcome this obstacle the customer can invest in monitoring the service provider's actions and use this information in the service arrangement. For simple services complete monitoring of service provider activities may be possible, in which case a best solution – entailing optimal risk-sharing – can be achieved by setting up an arrangement that penalizes inadequate service delivery.

Figure 1
The Satisfaction Mirror and Moral Hazard



Generally, however, full observation of actions is either impossible or prohibitively costly. In such situations imperfect aspects or indicators of actions are emphasized. The design of the service arrangement has to ensure that both risk-sharing and motivation assist in acquiring desired service solutions while minimizing any costs related to monitoring the service provider. The service arrangement design will thus determine the overall level of customer satisfaction with the service provider.

Simultaneously, this dyadic service relationship also entails reversed information asymmetry in which the service provider has imperfect information about the service context and/or the specific services solution needed by the customer. For this context-specific information, the customer becomes in effect the agent of the front-line service provider. Such a dual role (i.e., the customer as both principal and agent) is not unknown in agency theoretic situations (e.g., Devinney and Dowling 1999).

Context-specific imperfect information results because the customer alone has intimate knowledge of the environment in which the need for service was originally identified as well as the symptoms that are necessary for service task diagnosis, and yet it is the service provider who requires that information. The service provider as the principal thus contracts with the customer as agent to provide the necessary information. As with all principal-agent relationships, information asymmetry exists to the advantage of the agent (in this case, the customer), and the service provider must expend agency costs (specifically, time spent, which is a monitoring cost) in order to minimize the asymmetry and be able to perform the needed service. The extent to which the service provider is unable or unwilling to expend the necessary agency costs puts an upper limits on the level of satisfaction the customer can ultimately receive and can even prevent satisfaction from occurring at all. Coase (1937) refers to this type of monitoring cost as marketing cost.

This reversed principal-agent situation requires the design of an arrangement which addresses the moral hazard issue in which it is the service provider who now has to ensure that both risk-sharing and motivation assist in delivering an appropriate service solution while minimizing costs related to monitoring the customer's information provision. Here, the design of the implicit or explicit arrangement will determine the overall level of front-line service provider satisfaction with the customer relationship.

A SECOND DYAD

The service provider is also involved in a second dyad, this one with the organization that employs the individual. As with the staff-customer dyad, the two parties in the staff-organization dyad are presumed to be efficiency maximizers.

Parallel logic similar to that previously stated regarding the customer can be applied to the organization, with the result that the organization's effort to maximize its efficiency results in its satisfaction with the service provider as a member of staff. Similarly, the service provider's attempt to maximize efficiency in this relationship yields its satisfaction with its relationship with the employer/employer, such satisfaction more commonly known as job satisfaction.

Because of the two potentially competing dyads in which the service provider operates, he/she is thus in a situation of dual moral hazard. [Note that here we use the term differently to "double moral hazard," in which principal and agent in a single dyad are both involved in production and thus may both exhibit shirking behavior; see Cooper and Ross (1985) for an early use of that term.] Dual moral hazard creates for the service provider a utility function that includes variables relating both to the service provider's relationship with the customer and his/her relationship with the employing organization. The service provider must simultaneously solve the two efficiency maximization problems. It is reasonable to assume that the two are not of equal weight and that the efficiency maximization equation resulting from the relationship with the customer is conditional on that from the organization. Thus, it is the existence of the second relationship, that between the organization and the service provider, which prevents the satisfaction mirror from having a higher positive correlation over time than is currently reported in the literature.

PROPOSITIONS

Is the satisfaction mirror desirable? Is it an advantage to the employing organization for the service provider's job satisfaction to be positively correlated with customer satisfaction? If so, is it to the organization's advantage to attempt to maximize the strength of the satisfaction mirror?

Anecdotal evidence suggests that practitioner managers find the satisfaction mirror appealing (Heskett, Sasser and Schlesinger 1997) and would like to strengthen the mirror, using it as a path to both increased profitability through heightened customer satisfaction and also to reduced staff turnover through increased job satisfaction. To do so, however, dual moral hazard must be reduced.

The greater the disparity between the solution for maximizing efficiency of the service provider's explicit/implicit contract with the organization and the solution for maximizing efficiency of the implicit contract with the customer, the weaker the satisfaction mirror will be. A more customer-satisfaction-focused implicit agreement in the customer-staff dyad will yield less moral hazard and greater efficiency (at least from the customer's perspective), thus increasing customer satisfaction. At the same time, a more outcome-focused contract between the staff member and the employing organization will lessen moral hazard in that dyad and create a more efficient contract from the organization's perspective.

Thus we have a situation in which potential goal incongruence across the two dyads can be reduced. This is a necessary but not sufficient condition for reducing the dual moral hazard that characterizes the staff member's situation: the staff member must balance his or her effort toward satisfying the customer against effort toward accomplishing the organization's objectives.

Reducing this dual moral hazard requires the alignment of the customer's and the organization's objectives from the perspective of the service-providing staff member. This leads to our first proposition.

Proposition 1: A greater customer satisfaction focus in the contract the organization has with each service-providing *staff member will strengthen the satisfaction mirror.*

Dual moral hazard involves the potential incongruence between the organization's objectives and the customer's objectives each with the staff member's objectives. The reduction of dual moral hazard will require a simultaneous lessening of both sets of incongruence, which means aligning the objectives from the staff member's perspective.

Taking a pure agency theory perspective, a sufficient condition for strengthening the satisfaction mirror is to put in place a more customer-satisfaction-focused contract for the staff-organization dyad. Alignment of the customer's and the organization's objectives – from the employing organization's perspective – is not a necessary condition for strengthening the satisfaction mirror, because it is only the organization's actual contractual arrangement with the staff member that impacts job satisfaction and thus affects the mirror.

However, the implementation of a customer-satisfaction-focused contract between organization and staff member without a parallel alignment of the organization's objectives toward customer satisfaction would not completely eliminate dual moral hazard, and its strengthening of the satisfaction mirror would be a nonsustainable solution for the employing organization. Given alignment of the customer's and the organization's objectives, the more customer-satisfaction-focused the staff-organization dyad's contract is, the less dual moral hazard there will be (i.e., the more sustainable and efficient the contract and arrangement from both the customer's and the organization's perspective).

Risk Aversion. Agency theory assumes that the agent is risk averse (e.g., Basu, Lal, Srinivasan and Staelin 1985) or at least no more of a risk-taker than the principal (Coughlan and Sen 1989). In the staff-organization dyad, the service provider as agent is presumed more risk averse than the organization and so will be inclined to resist an outcome-based contract. A contract between the organization and staff member focusing on customer satisfaction, which is the outcome of service provision, thus increases the risk to the service provider. The imposition of an undesired contract structure (the agent preferring a behavior-based contract; see Jensen and Meckling 1976) in a situation of heightened risk will yield lower job satisfaction (i.e., satisfaction with the relationship with the organization) and thus weaken the satisfaction mirror. This leads to our second proposition.

Proposition 2: The more risk-averse a front-line service staff member, the weaker the positive effect on the satisfaction mirror of a customer-satisfaction-focused [i.e., outcome-based] contract between staff member and organization.

Contract Structure. A more palatable alternative to a customer-satisfaction-focused outcome-based contract for the risk-averse staff member is a behavior-based customer-service-focused contract that emphasizes the service delivery process and activities. Given a customer-satisfaction-focused implicit agreement already existing in the customer-staff dyad, the risk-averse staff member's conflict between trying to maximize efficiency in the customer dyad and simultaneously in the organization dyad will now be limited.

Proposition 3: A greater customer service focus [i.e., behavior basis] in the contract the organization has with each risk-averse service-providing staff member will strengthen the satisfaction mirror.

As the number of desired behaviors/outcomes increases, a behavior-based customer-service-focused contract between organization and staff member is more efficient and therefore more acceptable to both parties (Holmstrom and Milgrom 1991). The structure of the contract will thus increase the service-providing staff member's job satisfaction. However, the greater number of targeted outcomes is also likely to water down the importance of any customer-focused outcome, since both the explicit/implicit customer-service-focused contract with the employing organization and the implicit contract with the customer will be increasingly incomplete the more complex the service consumption experience. This has the potential to decrease both the caliber of service provided and the resultant level of customer satisfaction which, in turn, can weaken the satisfaction mirror.

Proposition 4. Given a behavior-based customer-service-focused contract between organization and staff member, the greater the number of outcomes the organization desires from the staff member, the weaker the satisfaction mirror will be.

IMPLICATIONS

We have examined the satisfaction mirror as a principal-agent problem and used this framework to develop four propositions concerning various issues associated with the contract between the organization and the service-providing staff member. The next step is to empirically examine these propositions in a variety of contexts. This is the focus of our continuing work.

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AN INTEGRATED MODEL FOR THE EFFECTS OF PERCEIVED PRODUCT, PERCEIVED SERVICE QUALITY, AND PERCEIVED PRICE FAIRNESS ON CONSUMER SATISFACTION AND LOYALTY

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ABSTRACT

The complete products provided by most service industries contain both tangible and intangible parts, just in different proportions. Previous empirical research in this field tended to emphasize service quality only. The purposes of this study are 1) to balance service quality and product quality into an integrated model, and 2) to explore the effects of three consumer perceptions (product quality, service quality, and price fairness) on satisfaction and loyal behavior. Automobile maintenance service is chosen as an examined object because both technicians' skills and parts' quality are essential to consumers. A survey of 495 customers is conducted in 15 repair centers of three major auto firms, Mitsubishi, Nissan, and Toyota. The results illustrate that (a) perceived service quality mainly affects consumer loyalty through satisfaction, while (b) perceived product quality and perceived price fairness have both direct and indirect (through satisfaction) effects on loyalty. Consumers' perceptions about service quality, product quality, and price fairness are almost equally important to build up their satisfaction. We suggest that managers consider product quality and price as the foundations to build up consumer satisfaction and loyalty and to improve service quality as an add-on value to consumers.

INTRODUCTION

Service industries are playing an increasingly important role in the economies of developed countries. As in most developed countries, services currently account for over 60% of the Taiwan's GDP. Service management has also become an important issue in Taiwan.

To date the studies of service quality and consumer satisfaction have dominated the service-related literature (Cronin, Brady, and Hult 2000), and the dimensions and measurements of service quality have been thoroughly examined. Parasuraman, Zeithaml, and Berry (1985) built up a well-accepted five-gap service quality model which has led the main stream of service quality research. In past decades, Taiwan's researchers have observed the measurement and management of service quality, but few studies focused on the determinants of consumer satisfaction other than the quality of service issue.

Besides abundant discussions regarding consumer satisfaction, Voss, Parasuraman, and Grewal (1998) suggested that the price decision has an impact on consumers' satisfaction in service industries. Parasuraman, Zeithaml, and Berry (1994) also indicated that the influences of product quality and consumers' perceived price were often ignored in prior consumer satisfaction studies. In addition, until now, the simultaneous investigation of the interrelationships between perceived product quality, perceived service quality, perceived price fairness, satisfaction, and loyalty has not yet been done.

Another critical issue is the dichotomy of classifying any product into a pure physical category or an intangible one. The intact product provided by most industries contains both tangible and intangible parts, just in different proportions (Rathmell 1966; Rushton and Carson 1989; Shostack 1977). Much attention has been paid to only the intangibility of service in prior related studies (Bebko 2000; Lovelock 1983; Rathmell 1966; Rushton and Carson 1989; Shostack 1977; Wakefield and Blodgett 1999). The tangible dimension of service quality was defined as the appearance of physical facilities, equipment, personnel, and communication materials, but not the physical product bought by consumers. Price, another important factor on consumer satisfaction, was mentioned by Parasuraman, Zeithaml, and Berry (1994), but was rarely investigated in previous studies. Voss, Parasuraman, and Grewal (1998) also pointed out the lack of literature exploring the possible effect of a consumer's price decision on the degree of satisfaction. Thus, the motive of this study is to combine service quality, product quality, and price into one complete model.

It was commonly suggested that service quality is an antecedent of consumer satisfaction, and that consumer satisfaction leads to consumer loyalty (Cronin, Brady, and Hult 2000). However, unlike prior studies, Lee (1998) found that service quality and product quality directly led to favorable consumer loyalty while influencing satisfaction. Therefore our objective is to examine the effects of product quality, service quality, and perceived price on both consumer satisfaction and consumer loyalty. Though these relationships have been discussed theoretically (Anderson, Fornell, and Lehmann 1994; Bolton and Drew 1991; Oliver 1999; Parasuraman, Zeithaml, and Berry 1988; Zeithaml 1988), an empirical study shall provide more insight to this area.

CONCEPTUAL BACKGROUND

Early in the studies of service industries, many studies focused on the dimensions and measurement of service quality. More recently, Cronin, Brady, and Hult (2000) and other researchers were more concerned with the understanding of the relationship among related constructs as well as the effects of the constructs on consumer behavior. For the purpose of this study, literature regarding linkages between consumer satisfaction, consumer loyalty, service quality, product quality, and price will be reviewed in order to conduct hypotheses for the relationship.

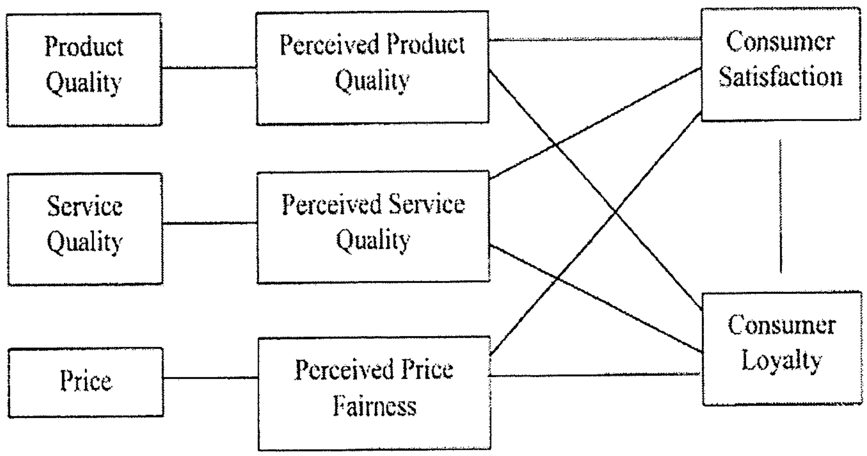
Consumer Satisfaction

The definition of consumer satisfaction has been divergent ever since Cardozo (1965) introduced this concept into the marketing field. Perceived service quality and satisfaction assessment depend on the function of the variation between consumer's perception and expectation of service levels. Therefore, these two terms were interchangeable in some previous studies until Parasuraman, Zeithaml, and Berry (1994) provided clear definitions for consumer satisfaction and service quality.

Howard and Sheth (1969) first denoted consumer satisfaction as a related psychological state to appraise the reasonableness between what a consumer actually gets and gives. Churchill and Surprenant (1982) suggested consumer satisfaction resulted from purchasing and using a certain product, which was made by a consumer to compare the expected reward and the actual cost of the purchase. Oliver (1981) defined satisfaction as a total psychological state when there is an existed discrepancy between the emerging emotion and expectation, and such an expectation is a consumer's feeling anticipated and accumulated from his or her previous purchases. On the other hand, in a study of durable goods, the main factor for consumer satisfaction was not the gap between "the product performance" and "expectation," or the initial expectation (Churchill and Surprenant 1982). The major factor was the "production performance" that determined the consumer satisfaction. The understanding of satisfaction implies that satisfaction is particularly incurred towards a particular purchase. A consumer compares the actual benefit and cost level in the purchasing behavior with the expected level of benefit. After this appraisal process, positive or negative feelings and emotions occur.

Parasuraman, Zeithaml, and Berry (1994) suggested that, service quality, product quality, and price all influence satisfaction. Voss and colleagues (1998) indicated satisfaction results from the function of price, expectation, and

Figure 1
A Conceptual Framework for the Effects of Perceived Product Quality, Service Quality, and Price Fairness on Consumer Satisfaction and Consumer Loyalty



performance. The current study also regards consumer satisfaction as the function of perceived service quality, product quality, and price (as shown in the top left hand side of Figure 1), and it is measured by consumer's overall judgment.

Consumer Satisfaction and Loyalty

Consumer satisfaction leads to brand loyalty (Cronin, Brady, and Hult 2000; Cronin and Taylor 1992; Lee 1998; McDougall and Levesque 2000). In a modification of Oliver's definition (1997, p.392), loyalty is defined as a deeply held commitment to repeat purchases of a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior. This definition focuses on behavior. From the behavioral view, the definition and measurement of consumer loyalty are based upon a consumer's actual purchasing behavior. The typical measurement is the proportion of the purchases for certain brands among the consumer's total purchases during a certain phase, but Jacoby and Chestnut (1978) concluded that consistent purchasing as an indicator of loyalty could be invalid because of happenstance buying or a preference for convenience and that inconsistent purchasing could mask loyalty if consumers had brand loyalty to several brands in one product category. However, the behavioral measurement could not distinguish consumer loyalty from repeatedly habitual purchase behavior. Therefore, some researchers preferred to emphasize the attitudinal part of consumer loyalty and defined consumer loyalty on the basis of both behavior and attitude (Oliver 1997).

However, other concepts, such as perceived quality, perceived price, and satisfaction in this study, all reflect the attitudes of a consumer towards a target object. To distinguish consumer satisfaction and consumer loyalty, loyal repeat purchase behavior would be a better measurement to eliminate any possible confusion. Many related empirical studies (Cronin, Brady, and Hult, 2000; Cronin and Taylor 1992; Lee 1998; McDougall and Levesque 2000) reported that satisfied consumers demonstrate more loyal behavior. The first hypothesis is to repeat the test of this relationship:

H_1: Consumer satisfaction is positively related to consumer loyalty.

Perceived Quality

As stated by Parasuraman, Zeithaml, and Berry (1985), quality has been a complex but vague construct which demands further investigation for the industries to highlight product and service quality as satisfaction management. Zeithaml (1988) noted that quality could be defined broadly as superiority or excellence, and by extension, perceived quality could be defined as the consumer's judgment about a product's overall excellence or superiority. Perceived quality is (1) different from objective or actual quality, (2) a higher-level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set. "Objective quality" is the term used in the literature to describe the actual technical superiority or excellence of the products (Zeithaml 1988). Thus, the perceived quality perspective is different from product-based and manufacturing-based approaches. Most corporations adopt their quality definition from market-oriented viewpoints (Main 1994), rather than from objective quality measures manufacturers use.

In most service industry marketing literature, perceived service quality captures the spot light, while perceived product quality is absent. For most service industries providing intangible services and tangible goods, these two forms of products both play important roles in consumer satisfaction and loyalty. Hence, perceived quality is discussed in this study in two parts, service quality and product quality.

Perceived Service Quality. Parasuraman, Zeithaml, and Berry established the Five-Gap Model in 1985, which established the structure and measurement of service quality. They assumed that the methods to measure service quality and consumer satisfaction were basically the same, with both based on comparisons of expectation and performance. Oliver (1993) pointed out that some service contact for consumers was essential to decide if they were satisfied, but for service quality, the recognition could be done with or without actual consumption of the service.

Most researchers suggested that high service quality resulted in high customer satisfaction (Parasuraman, Zeithaml, and Berry 1985, 1988). After service quality and perceived service are distinguished, Bitner (1990) suggested that good service quality led to satisfaction, and consumer satisfaction increased the evaluation of service quality again. The results of path analysis supported that service quality affected satisfaction, and then influenced perceived service quality significantly (Bitner 1990). Teas (1993) also mentioned that perceived service quality was the accumulation of consumer satisfaction.

However, it is difficult to separate true service quality and perceived service quality from a customer's viewpoint. Therefore, most researchers only measured perceived service quality and proposed that higher perceived service quality created more satisfaction to consumers. Cronin and Taylor (1992) asserted that service quality was the antecedent of consumer satisfaction when they examined four service industries of banking, pest control, dry-cleaning, and fast food to investigate the relation of service quality to consumer satisfaction. The same conclusion also appeared in other studies in this area (e.g., Anderson and Sullivan 1993; Anderson, Fornell, and Lehmann, 1994; Athanassopoulos 2000; Cronin, Brady, and Hult, 2000; Fornell 1992; Fornell, Johnson, Anderson, Cha, and Bryant 1996; Oliver and Desarbo 1988). This study then proposes the impact of perceived service quality on consumer satisfaction:

H_2: Perceived service quality is positively related to consumer satisfaction.

Perceived Product Quality. Most previous service marketing research emphasized the construct and dimension of service quality, or its relation with consumer satisfaction and loyalty. In fact, most service industries provide both intangible and tangible products. In Shostack's (1977) categorization, salt and soft drinks are products nearly pure tangible; whereas consulting companies and teaching institutions provide nearly pure intangible service. Therefore, Rathmell (1966) rendered a concept of goods-service continuum with pure goods at one extreme and pure services at the other, but with most industries falling between these two extremes. Nevertheless, few researchers touched upon the issues of tangible products in service industries. In Lehtinen and Lehtinen's (1991) service quality dimension, physical quality of service included physical support—physical environment and equipment, as well as physical products. The "physical environment and equipment" was similar to the tangible dimension proposed by Parasuraman, Zeithaml, and Berry (1988). Physical product was considered, but treated as only part of the overall physical quality of service (Lehtinen and Lehtinen 1991).

After reviewing 32 studies about service industries, Cronin, Brady, and Hult (2000) suggested the tangible quality of service products should be included in the satisfaction model in the future study. They also indicated the importance of product quality on consumer decision-making. In Brucks, Zeithaml, and Naylor's (2000) study of the perceived quality construct of consumers' durable goods, perceived product quality played a crucial role affecting the purchasing choices. In the satisfaction model proposed by Parasuraman, Zeithaml, and Berry (1994), product quality was of same importance to affect consumer satisfaction as service quality. As a consequence, this study considers product quality as an independent factor and investigates its influence on consumer satisfaction.

H_3: Product quality is positively related to consumer satisfaction.

Perceived Price Fairness. As for the relation of price to satisfaction, Zeithaml and Bitner (1996) indicated that the extent of satisfaction was broader than that of service quality assessment and was subject to the factors of service quality, product quality, price, situation, and personal factors. Anderson, Fornell and Lehmann (1994) also emphasized price as an important factor of consumer satisfaction, because whenever consumers evaluate the value of an acquired service, they usually think of the price (e.g., Anderson and Sullivan 1993; Athanassopoulos 2000; Cronin, Brady, and Hult, 2000; Fornell 1992; Zeithaml 1988). However, price was not fully investigated in previous empirical studies (Spreng, Dixon, and Olshavsky 1993). Zeithaml and Bitner (1996) believed that the reason why the price variable was not properly discussed in the measurement of service quality was the lack of consumers' exact reference of price.

Abundant empirical surveys reported in the marketing area indicated that both objective price and perceived price are crucial factors for consumers to evaluate quality (Zeithaml 1988). From consumer's cognitive conception, price is something that must be given up or sacrificed to obtain certain kinds of products or services (Zeithaml 1988). Thus, price had been recognized as a kind of sacrifice in previous research (Anderson, Fornell and Lehmann, 1994; Athanassopoulos 2000; Chang and Wildt 1994; Sirohi, McLaughlin, and Wittink 1998). Zeithaml (1988) suggested that objective monetary price was not equal to the target price in consumers' mind. The definition of price based upon the consumer's viewpoint was the price that consumers perceived, that is, the perceived price. To consumers, perceived price is more meaningful than monetary price.

Usually, the lower the perceived price is, the lower perceived sacrifice is (Zeithaml 1988). Then, more satisfaction with the perceived price and overall transaction are created. On the other hand, it is also possible that consumers use the price as a clue. It implies that lower monetary price or perceived price does not guarantee higher satisfaction. Consumers usually judge price and service quality by the concept of "equity," then generate their satisfaction or dissatisfaction level (Oliver, 1997). However, rationally low perceived price does ensure higher satisfaction. This study then proposes the following:

H_4: Perceived price fairness is positively related to consumer satisfaction.

The Relationship Among Perceived Service Quality, Product Quality, Price Fairness, and Consumer Loyalty

Previous research has confirmed a positive relationship between service quality and consumer satisfaction. However, the majority of studies indicated that service quality influences behavioral intention only through satisfaction (e.g., Anderson and Sullivan 1993; Gotlieb, Grewal, and Brown 1994), while others argued for a direct effect (e.g., Boulding, Zeithaml, Kalra, Staelin, and Zeithaml 1993; Parasuraman, Zeithaml and Berry 1988; 1991). In Cronin and Taylor's (1992) empirical study, it was proposed that perceived service quality has a significant impact on purchase intentions. However, the results showed a significant impact of perceived service quality on consumer satisfaction, then influenced the purchase intention indirectly. Recently, Cronin, Brady, and Hult (2000) suggested that service quality would directly and indirectly lead to favorable behavioral intentions simultaneously. They found that service quality had a direct effect on consumers' behavioral intentions in four of the six tested industries, and an indirect effect through satisfaction on loyalty in all six industries. Thus, the following hypothesis is proposed:

H_5: Perceived service quality has positive effects both directly and indirectly (through consumer satisfaction) on consumer loyalty.

Recently, Lee (1998) applied the satisfaction model presented in Parasuraman, Zeithaml, and Berry (1994) and Zeithaml and Bitner (1996) to explore how perceived quality of gasoline affected consumer satisfaction and loyalty toward gas stations in Taiwan. Although all gasoline from those gas stations was supposed to be the same in quality because it was provided by one company, Chinese Petroleum Corporation, Lee's empirical results demonstrated that drivers' evaluations of gasoline qualities from different gas stations varied. Drivers did not trust the qualities of gasoline offered by some privately owned gas stations. Perceived product quality not only had effects on consumer satisfaction, but also placed influence directly on consumer loyalty as shown in Lee's study (1998). In addition, perceived product quality had a stronger impact on consumer loyalty than did satisfaction. The most interesting finding was that the respondents in Lee's study would repeatedly pay their visits to a gas station for which they were "not satisfied," but the station had reliable product quality. The explanation provided was that consumers cared more about the quality of gasoline than of service. This was because gasoline rather than service was the core product that consumers purchased in a gas station; consumers would go to a gas station with perceived superior gasoline and inferior service. It also implied that consumer behavior, for example, repeat purchase, was closely related to physical products, whereas consumer satisfaction was mostly associated with service quality (Lee 1998).

Based upon the unique findings of Lee (1998), the current study proposes to investigate the relationship between perceived product quality, perceived price fairness, and loyalty. If perceived product quality has strong effects on loyalty behavior, a similar direct effect of perceived price fairness on loyalty may also be found. From a consumer's perspective, price is what is given up or sacrificed to obtain a product. When consumers perceive that the price of a service or product is reasonable, it is possible for them to display the intention of repeat purchase behavior. On the other hand, if consumers do not feel that their sacrifices are worthwhile, they may not make the purchase again, even when they are satisfied with the quality of a product or service. We suggest that both consumers' perceived product quality and price fairness may place direct influences on purchase behavior: as hypotheses six and seven propose here.

H_6: Perceived product quality has positive effects both directly and indirectly (through consumer satisfaction) on consumer loyalty.

H_7: Perceived price fairness has positive effects both directly and indirectly (through consumer satisfaction) on consumer loyalty.

According to the satisfaction model proposed by Parasuraman, Zeithaml, and Berry (1994), Zeithaml's means-end model (1988), sets up an integrated conceptual framework. Perceived service quality, perceived product quality, and perceived price fairness are three abstract concepts of higher hierarchy, which serve as the basis to form consumer satisfaction, an even higher hierarchy of attitudes. In addition to the impact of consumer satisfaction upon loyal purchase behavior, perceived service quality, perceived product quality, and perceived price fairness may directly influence consumer loyalty (refer to Figure 1). The objective measures of service quality, product quality and price are not part of this study.

METHODOLOGY

All industry can be located on a goods-service continuum, with pure goods on one extreme and pure services on the other, but most industries are between the two extremes (Rathmell 1966; Shostack 1977). According to Rathmell's (1966) and Shostack's (1977) concept, three industries, (1) gas station service, (2) auto repair and maintenance service, and (3) banking service were chosen to test their proportions of tangible and intangible parts. After a small pretest of 87 subjects, auto repair and maintenance service is selected because it was perceived as half-tangible and half-intangible. To respondents of this study, both skills and services, as well as parts and oil have almost equal importance. This study then investigates how consumers' perceptions of product quality, service quality, and price fairness influence their satisfaction and loyalty.

Sampling and Data Collection

Taiwan's car market is dominated by three major automobile companies: Nissan, Toyota, and Mitsubishi. Five maintenance service centers selected for each of these three companies, a total of fifteen, located in the Greater Taipei Metropolitan Area were chosen for the study. Trained interviewers through March 17 to March 25 in the year 2000, 40 to 90 copies in each center depending on its business volume, distributed the total of 650 sets. Each customer received a copy of the questionnaire while checking out in the waiting room. The questionnaire was collected before the customer left. The response rate was 97.69%.

Nearly all the respondents (95.76%) had their cars fixed at only one or a few maintenance service centers, and 95.35% of the respondents had previously been at this service center. Therefore, responses to the survey are based upon the customers' current experiences or on a combination of previous experiences and current experiences with the surveyed service center.

Questionnaire Design and Measurements

The questionnaire contains three sections. The first section is about the experience and overall evaluation of purchasing car maintenance services, relating to frequency, quality judgment and satisfaction toward the services, parts, and price in the current center, and loyalty. The second section is about the perception of service quality. The last part is concerned with personal background information. The definition and measurement of each variable are described in the following.

Consumer Satisfaction. A direct performance appraisal is chosen to measure the consumers' overall satisfaction with the maintenance center, as suggested by Finn and Kayande (1997). This study uses a single-item, asking respondents "How satisfied are you with the maintenance center?" A consumer's satisfaction level toward the center is coded from 1 to 5 representing very dissatisfied, dissatisfied, common, satisfied, and very satisfied, respectively.

Consumer Loyalty. Consumer loyalty expresses an intended behavior related to the product or service. Two items are formed to measure a consumer's loyalty toward a center: (1) remain loyal to it through repurchase (i.e., I will come to this maintenance center again when I need auto-repair service next time,) and (2) recommend it to other consumers (i.e., I will recommend this maintenance center to friends and relatives when they need one.) These two items are similar to the measurement used in previous research (Cronin, Brady, and Hult, 2000; Cronin and Taylor 1992; McDougall and Levesque 2000; Selnes 1993). A five-point scale ranges from "very unlikely" to "very likely" to assess the consumer loyalty. Internal consistency, i.e. Cronbach's alpha, of these two items is equal to 0.76.

Perceived Service Quality. An empirical study by Cronin and Taylor (1992) has proved that SERVPERF (performance perceptions in measures of service quality) is a more effective measure in terms of considerations of reliability, validity or explanatory power. They suggested that performance perceptions could be applied to measure service quality in order to explain the variation in the construct (Zeithaml and Bitner 1996). As a result, the concept of post-perception is adopted here to measure perceived service quality.

The measurement of service quality, SERVQUAL, formulated by Parasuraman, Zeithaml, and Berry is the most frequently applied measure of the construct of service quality, with various versions proposed by researchers for different service industries. This study includes a set of 23 items based upon SERVQUAL. All items are modified for auto maintenance service industry and confirmed by several marketing professors and senior managers in the three firms to secure the content validity. An overall service quality item is then listed at the bottom of the 23 questions. All of the statements are formed positively in a five-point Likert-type scale ranged form "strongly disagree" to "strongly agree."

Three factors with eigenvalues greater than 1 are extracted by the principal component analysis. Promax rotation is then employed to produce an orthogonal matrix. Two items are deleted because their factor loadings are greater than 0.4 in more than one factor. The three final factors are named reliability, tangibility, and convenience, with internal reliability 0.92, 0.89, and 0.81, respectively. Our reliability includes the original SERVQUAL scale's reliability and assurance; convenience covers both empathy and responsiveness; and tangibility is kept the same. The inconsistent dimensions are acceptable, as Carman (1990) has found heterogeneous dimensions in four different service sectors. Because the purpose of this study is not about the dimensions of service quality, the results of the factor analysis are only for confirming the validity and reliability of the scale.

The result of the 23-item service quality scale is highly correlated with the single-item overall quality measurement. The single-item is used to test the hypotheses in this study similar to the operational definition of service quality in Cronin and Taylor (1992) and Oliver (1997).

Perceived Product Quality. Perceived product quality in this survey is defined as consumers' judgment of the quality of parts and oil offered by the automobile maintenance center. For example, "The quality of parts provided in this maintenance center is good," ranked from "strongly disagree" to "strongly agree." The internal consistency of these two five-point

Likert-type items assessed by Cronbach's alpha is 0.55.

Perceived Price Fairness. Perceived price is defined as what is given up or sacrificed to acquire a service or product (Athanassopoulos 2000; Cronin, Brady, and Hult, 2000; Voss, Parasuraman and Grewal, 1998). It represents consumers' perceptions of the monetary and the non-monetary price associated with the acquisition and use of a service or product. In this study, respondents are asked to directly evaluate if the wages and the cost of auto parts charged by the maintenance center are reasonable. Two five-point items are ranging from "very unreasonable" to "very reasonable" for wages and parts separately. Internal consistency of these two questions is Cronbach's alpha 0.84. (It should be mentioned that the term "reasonable price" in Mandarin implies "good deal" and "acceptable price.")

Data Analysis

Confirmatory Factor Analysis and Path Analysis are first employed through use of the LISREL model. However, only GFI=0.91 reaches the acceptable level; other measures (e.g., RMSEA, Chi-square statistic, CFI, AGFI) do not reach the criteria. The suggestion of Baron and Kenny (1986) regarding mediational test is taken (cf. Jap and Ganesan's 2000 methodology). The similar findings are found as LISREL's results. Although Linear Structure Relation (LISREL) is allowed to analyze our conceptual model, Path Analysis provides more insights about the amount of influences (i.e. coefficients) and comparisons among variables.

Path Analysis is suitable to examine the relationships between perceived service quality, perceived product quality, perceived price fairness, consumer satisfaction, and consumer loyalty. Consumer satisfaction is treated as a mediator from perceived service quality, product quality, and price fairness to consumer loyalty. Baron and Kenny (1986) stated that three regression equations must be estimated to establish a mediation model and the following effects must hold: (1) a significant effect of regressing the mediator on the independent variable, (2) a significant effect of regressing the dependent variable on the independent variable, and (3) when regressing the dependent variable on both the mediator and the independent variable, the effect of the independent variable must be weaker than in Equation 2. If all three of these conditions hold, the mediation model is supported. Baron and Kenny noted that "the strongest demonstration of mediation" occurs when the independent variable "drops out" (which is reduced to insignificant) in Equation 3.

RESULTS AND DISCUSSIONS

After eliminating those responses, which are incomplete with too many missing answers, 495 respondents are valid for analysis. Within them, 85.86% are male, which reflects the actual car owners' gender ratio that male owners account for more than 80%. Ninety-five percent of the respondents have a high school education or higher. More than 65% of the respondents' monthly family income is between 30000 to 90000 NT dollars (34 NT dollars equal 1 US dollar). There is no significant difference among the respondents of the three companies, Nissan, Mitsubishi, and Toyota.

Table 1 presents the descriptive statistics and correlation coefficients of variables involved in this study before the hypothesis tests. Due to some high correlation coefficients, the variance inflationary factor (VIF) is further used to examine the degree of multicollinearity among independent variables. The results indicate that there is virtually no multicollinearity problem in these variables since the VIF values of all independent variables are below 1.89. This VIF value is slightly bigger than 1, which indicates that there is no correlation among all the independent variables, but far smaller than 10 which implies a serious multicollinearity problem (Hair, Anderson, Tatham, and Black 1995).

Table 1
Descriptive Statistics and Correlation Coefficients

Variable	Mean	S.D.	Service quality	Product quality	Price fairness	Consumer satisfaction
Service quality	4.07	0.51				
Product quality	3.74	0.64	0.68 **			
Price fairness	4.43	0.74	0.42 **	0.49 **		
Consumer satisfaction	3.99	0.56	0.48 **	0.54 **	0.52 **	
Consumer loyalty	3.88	0.75	0.44 **	0.50 **	0.55 **	0.56 **

Note: ** denotes p<0.01, sample size = 495.

Table 2
The Regression Analysis of Consumer Satisfaction on Consumer Loyalty

Dependent Variable	Independent Variables	Estimated Coefficient
Consumer Loyalty	Constant	1.869 **
	Consumer Satisfaction	0.482 **
	Model's F-Value	227.857 **
	Adjusted R^2	0.315

Note: ** denotes p<0.01, sample size = 495.

The Impact of Consumer Satisfaction on Consumer Loyalty

The results of the effect of consumer satisfaction on consumer loyalty are shown in Table 2. The empirical result in this model confirms that consumer satisfaction is positively related to consumer loyalty (F = 227.857, significant at the $\alpha = 0.01$ level). One more unit on consumer satisfaction increases 0.315 unit of consumer loyalty. Hypothesis 1 is supported and the result is consistent with previous studies (Cronin, Brady, and Hult, 2000; Lee 1998; McDougall and Levesque 2000). The adjusted R^2 is 0.315, which is adequate, but also implies the existence of other factors.

The Relationship among Perceived Service Quality, Consumer Satisfaction, and Loyalty

Path Analysis is adopted to test the "antecedent, mediating, and consequent" relationships among perceived service quality, product quality, price fairness, consumer satisfaction, and consumer loyalty (Baron and Kenny 1986). Table 3 presents the regression results of three models. The first model regresses consumer satisfaction on perceived service quality, product quality, and fairness. The second model regresses loyalty on the three variables. The final model regresses loyalty on satisfaction and three independent variables. The F-values for the three model are 106.49, 99.16, and 92.42, which are all significant at the $\alpha = 0.01$ level. The explained variances measured by the adjusted R^2 are 0.39, 0.37, and 0.43, respectively.

Hypothesis 2 proposes that a consumer's perceived service quality is positively related to satisfaction. From the results of the regression Model 1, service quality is significant at the $\alpha =$ 0.01 level with t value 3.09. Consumer satisfaction is increased by 0.22 units when perceived service quality is raised one unit. The positive relationship between service quality and

Table 3
The Regression Analysis of Perceived Service Quality, Product Quality, Price Fairness, and Consumer Satisfaction on Consumer Loyalty

Dependent Variable	Independent Variables	t value	Estimated Coefficient	95% Confidence Interval	
				Lower Bound	Upper Bound
Model 1 Consumer Satisfaction	Constant	1.60	0.355	-0.081	0.790
	Service Quality	3.09 **	0.220	0.080	0.360
	Product Quality	5.65 **	0.379	0.247	0.511
	Price Fairness	7.91 **	0.326	0.245	0.407
	Model's F Value	106.49 **			
	Adjusted R^2	0.39			
Model 2 Consumer Loyalty	Constant	4.73 **	0.912	0.533	1.291
	Service Quality	2.63 **	0.162	0.041	0.284
	Product Quality	4.42 **	0.258	0.144	0.373
	Price Fairness	9.23 **	0.331	0.260	0.401
	Model's F Value	99.16 **			
	Adjusted R^2	0.37			
Model 3 Consumer Loyalty	Constant	4.44 **	0.882	0.458	1.186
	Service Quality	1.78	0.107	-0.011	0.224
	Product Quality	2.81 **	0.162	0.049	0.276
	Price Fairness	6.81 **	0.248	0.177	0.320
	Consumer Satisfaction	6.74 **	0.253	0.179	0.327
	Model's F Value	92.42 **			
	Adjusted R^2	0.43			

Note: ** denotes $p<0.01$, sample size = 495.

consumer satisfaction is supported.

In Model 2, service quality has a significant effect on consumer loyalty ($t = 2.63$, $p < 0.01$), while service quality is not significant in Model 3 ($t = 1.78$, $p = 0.08$). Combining the results of the three models, the mediating effect of perceived service quality is confirmed. Perceived service quality has a positive effect on satisfaction (significant in Model 1), and through satisfaction influences loyalty (significant in Model 2, but not in Model 3). The results imply that perceived service quality has only indirect positive effect on consumer loyalty, and nearly no direct effect on loyalty. Hypothesis 5, which proposes that perceived service quality has both direct and indirect effects on loyalty, is partially supported.

The Relationship among Perceived Product Quality, Consumer Satisfaction, and Loyalty

The same process is used to explain the relationship between perceived product quality, satisfaction, and loyalty. The perceived product quality in service marketing studies was often ignored. However, in our empirical results, perceived product quality does demonstrate an important role on consumer satisfaction. As expected, perceived product quality and consumer satisfaction have a significant positive relationship ($t = 5.65$, $p < 0.01$). Consumer satisfaction was increased by 0.379 units while product quality was raised by one unit. This positive relationship supports Hypothesis 3.

Furthermore, we discuss the effects of perceived product quality directly and indirectly on consumer loyalty as proposed in Hypothesis 6. It is found that perceived product quality has significant effects on consumer loyalty in both Model 2 ($t = 4.42$, $p < 0.01$) and Model 3 ($t = 2.81$, $p < 0.01$). However, the estimated coefficient is 0.258 in Model 2, but drops to 0.162 in Model 3 when satisfaction is included. Since perceived product quality is significant in three models and a weaker effect in Model 2 than Model 3, the mediating effect of satisfaction is accepted. Perceived product quality has an indirect effect on loyalty. Due to the significant result of product quality in Model 3, it also has a direct effect on loyalty while satisfaction is included. Thus, Hypothesis 6 is supported that perceived product quality has both direct and indirect positive effects on loyalty.

The Relationship among Perceived Price Fairness, Consumer Satisfaction, and Loyalty

Perceived price fairness is positively and significantly related to consumer satisfaction at the 0.01 level in Model 1 ($t = 7.91$). Consumer satisfaction is increased by 0.326 units when perceived price fairness is raised by one unit. This result is consistent with Yieh and Chiao's (2001) study, and with our expectation in Hypothesis 4 that there is a positive relationship between perceived price fairness and satisfaction.

Perceived price fairness also has significant effects on consumer loyalty in Model 2 ($t = 9.23$, $p < 0.01$) and Model 3 ($t = 6.81$, $p < 0.01$). Meanwhile, the estimated coefficient is from 0.334 lower to 0.248. Considering the significant results and changing in these three models, perceived price fairness is positively related to loyalty through satisfaction. The mediating effect of satisfaction for the relationship between perceived price fairness and loyalty is found. The strong effect of perceived price fairness in Model 3 (coefficient = 0.248, $p < 0.01$) also suggests a direct effect on loyalty. Hypothesis 7 that proposes the perceived price fairness has positive effects on consumer loyalty both directly and indirectly is accepted.

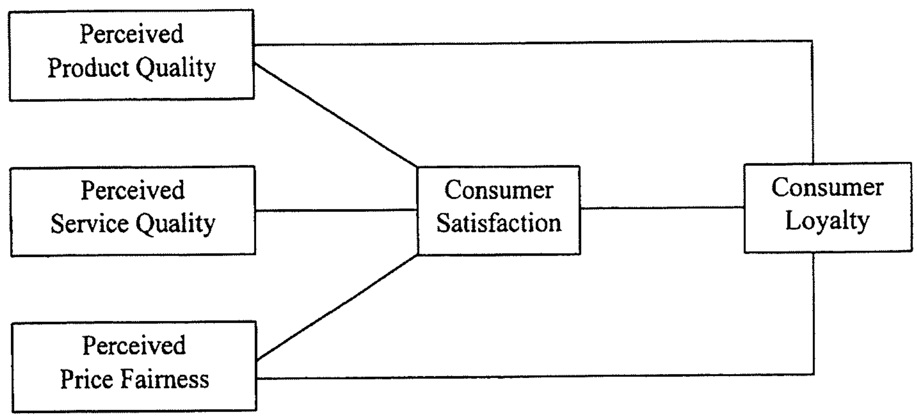
In order to understand the statistically significant differences among the three independent variables on consumer satisfaction, the confidence intervals are examined. The lower and upper bound of 95% confidence interval is from 0.080 to 0.360 for perceived service quality, from 0.247 to 0.511 for perceived product quality, and between 0.245 and 0.407 for perceived price fairness. The overlapped intervals imply that the effects of service quality, product quality, and perceived price on satisfaction are not significantly different. This result suggests these three variables have almost equal importance to build up consumer satisfaction.

CONCLUSIONS AND SUGGESTIONS

The main objectives of this study are to explore the effect of perceived service quality, perceived product quality, perceived and price fairness on consumer satisfaction and loyalty, and to establish an integrated model. The results of this study have verified the previous findings (Cronin, Brady, and Hult 2000; Cronin and Taylor 1992; Lee 1998; McDougall and Levesque 2000; Selnes 1993) that consumers establish higher loyalty toward a service when they are more satisfied. This is also consistent with prior studies (Athanassopoulos 2000; Cronin, Brady, and Hult, 2000; Cronin and Taylor 1992; Lee 1998; McDougall and Levesque 2000; Parasuraman, Zeithaml, and Berry, 1985; 1988; Yieh and Chiao 2001) that perceived service quality is an important determinant of consumer satisfaction.

In addition, perceived product quality and perceived price fairness played important roles on satisfaction. Although numerous researchers (Rathmell 1966; Rushton and Carson 1989; Shostack 1977) mentioned that most service

Figure 2
A Practical Model for the Effects of Perceived Product Quality, Perceived Service Quality, and Perceived Price Fairness on Consumer Satisfaction and Consumer Loyalty



industries provide both tangible products and intangible service, there was no empirical study focusing simultaneously on perceived service quality, perceived product quality, and perceived price. Since perceived product quality and perceived price were often not included in previous service marketing studies regarding consumer satisfaction, this study endeavors to establish the links among these elements.

As expected, the results provide concrete empirical evidences that perceived product quality and perceived price fairness are both positively related to consumer satisfaction, which are as equally important as perceived service quality. Thus, from a managerial standpoint, managers should not emphasize only service quality in a total consumer satisfaction program. Both product quality and price fairness are fundamental and also very important to build up consumer satisfaction. None of them can be ignored or partially accented.

In the revised integrated model (see Figure 2) based upon the results of this study, consumer satisfaction is a mediator for all perceived service quality, product quality, and price fairness. Perceived service quality has only indirect effect on loyalty through satisfaction. However, perceived product quality and price fairness both have direct and indirect effects on loyalty. Because service is considered intangible, consumers can only form their attitudes toward service quality through perception. This attitudinal inherence may limit the influences of perceived service quality only on satisfaction, but not directly on loyalty. On the other hand, product is more tangible and is usually the core part that consumers purchase for, such as the parts and oil in auto maintenance service, and hamburgers in fast food restaurants. Price is the necessary sacrifice that a consumer gives to exchange for the product and service. Perceived product quality and perceived price fairness certainly are the sources of consumer satisfaction. However, the fundamental natures of product and price may contribute to a consumer's loyally repetitive purchase behavior directly.

It is a suggestion to managers in service industries that price fairness and product quality can be viewed as threshold factors, while service quality is regarded similar to a motivator leading to consumer loyalty. No matter how hard a manager attempts to improve the service quality, product quality and price are the essential concerns to consumers. However, if consumers are only satisfied with the product and price provided by a firm, they may only repeat purchase habitually, but without true loyalty, as found in Lee (1998). Thus, the best strategy for a marketing manager in service industries is to ensure the basic quality of tangible products sold at a fair price, then emphasize service quality to provide added values in order to maintain customers.

Perceived service quality was found influencing loyalty only through satisfaction in some previous studies (e.g., Boulding, Zeithaml and Berry, 1993; Parasuraman, Zeithmal, and Berry, 1988; 1991; Taylor and Baker 1994), but directly affecting loyalty in others (e.g., Anderson and Sullivan 1993; Gotlieb, Grewal, and Brown, 1994). The findings of this study indicate that service quality is an antecedent of consumer satisfaction, and consequently consumer satisfaction influences consumer loyalty. This finding should not and does not intend to end or solve the conflict results in all these studies, but only provides documentation for further research.

Zeithaml (1988) pointed out that approximately 90 research studies in the past 30 years have been designed to test the general knowledge that price and quality are positively related. This study has also found that perceived price, perceived product quality, and perceived service quality are positively correlated (refer to Table 1). It implies the possibility that perceived quality influences satisfaction through perceived price.

Previous studies have suggested that good service quality led to satisfaction, and consumers' satisfaction increased the evaluation of service quality (Bitner, 1990; Bolton & Drew, 1991; Teas, 1993). It is also possible that a consumer's satisfaction from previous transactions can affect his/her judgments toward current service quality as suggested by this study. However, it cannot be verified due to the nature of cross-sectional data. A longitudinal study to investigate the feedback effect of satisfaction and loyalty on consumer perceptions would be recommended for further research.

Although we have tested linear relations among all the variables, consumer loyalty has been considered as a nonlinear function of satisfaction or service quality by some researchers (Oliva, Oliver, and MacMillan, 1992; Taylor, 1997). Taylor (1997) examined three service industries; fast food, grocery stores, and department stores, to explore any possible high-order relation. He found that the relation between perceived quality and purchase intention was not linear. Both quality and quality square were positively related to purchase intention. However, the nonlinear relation between satisfaction and purchase intention was only found in department stores. Taylor (1997) indicated that the unobserved potential higher-order factors (and their interactions) in such efforts could lead to problems associated with interpreting regression coefficients as weights of importance. Following Taylor's suggestions, the nonlinear relations among service quality, satisfaction, and loyalty have also been tested in this study as a Post Hoc study. However, none of the higher-order factors was significant. The linear or nonlinear relationship would be an important issue that requires future researchers to clarify.

Whether the tangible product and the tangible dimension of service quality should be combined or separated is an interesting issue. In Lehtinen and Lehtinen's (1991) study, their tangible dimension of service quality included both physical service supports (i.e., environment and equipment), as well as physical products. In the current study, these two tangibles are defined differently and divided into different variables.

Different effects on loyalty are also found. Service quality, including tangible dimensions, mainly contribute to satisfaction, whereas the perceived quality of tangible goods not only indirectly influences loyalty through the mediator of satisfaction, but also produces direct effect at the same time. It seems reasonable to separate these two tangible parts in service industries. However, how consumers truly evaluate these tangible components, either combined or separated, is not examined in this study. Are they accounted differently in other service industries by various proportions of services and products? Some model comparisons among several industries are necessary before a conclusion can be made. These induce an open field for further research.

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THE RELATIVE INFLUENCE OF AFFECTIVE EXPERIENCE ON CONSUMER SATISFACTION UNDER POSITIVE VERSUS NEGATIVE DISCREPANCIES

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ABSTRACT

This study investigates the relative influence of affective experience on satisfaction judgments in the expectancy-discrepancy paradigm (Oliver 1977, 1993). Based on the asymmetrical effects of positive and negative events, it is argued that the impact of affect on satisfaction varies asymmetrically across positive and negative discrepancies between perceived performance and expectations.

In the context of course evaluations conducted at a Korean university, the relative influence of affect on satisfaction judgments was compared between positive-discrepancy and negative-discrepancy groups. It was found that affect was more predictive of satisfaction for negative discrepancies than for positive ones; and, for the negative-discrepancy group, affect was more predictive of satisfaction than was discrepancy. The implications of these findings are discussed.

INTRODUCTION

According to the comparison standard paradigm, the essential determinant of satisfaction is the perception of confirmation or disconfirmation of preconsumption standards (Oliver 1989). Most studies of consumer satisfaction have been conducted within this paradigm, referring to alternative comparison standards such as predictive expectations (Churchill and Surprenant 1982; Oliver 1977, 1980; Spreng, MacKenzie, and Olshavsky 1996; Tse and Wilton 1988), desires (Spreng et al. 1996; Westbrook and Reilly 1983), equity expectations (Fisk and Young 1985; Oliver and Swan 1989), and experience-based norms (Cadotte, Woodruff, and Jenkins 1987). Thus, among the alternative comparison standards, the incorporation of predictive expectations in the expectancy-discrepancy model appears to be the most commonly used.

The expectancy-discrepancy model posits that satisfaction is a summary judgment based on the comparison between product performance and its prior expectation (Oliver 1977, 1993). In this model, the discrepancy between performance and expectation is the essential determinant of satisfaction. When you get what you expect, you have a confirmation; when you get more than expected, you have a positive discrepancy; and when you get less than expected, you have a negative discrepancy. Given that the discrepancy is a cognitive term, the model may underestimate the role of affect in the satisfaction process. Considering this, some researchers have added determinants that are related to the affective experience of the consumption episode. The affective approach (Mano and Oliver 1993; Oliver 1989, 1993; Westbrook 1987) proposes that affect influences satisfaction judgments independently of cognitive evaluation. These studies are based on the distinction between hedonic evaluation and utilitarian evaluation (Batra and Ahtola 1990; Hirschman and Holbrook 1982), and are further supported by research on the independent effect of affect on attitudes (Bodur, Brinberg, and Coupey 2000; Miniard and Barone 1997; Trafimow and Sheeran 1998).

A gap in the literature, however, appears to exist concerning the relative roles of affective and cognitive evaluations in predicting satisfaction. In Westbrook's (1987) study, affective variables explained as much variance in satisfaction judgments as did cognitive variables in the contexts of automobiles and cable pay television. Oliver (1993) found that disconfirmation was a better predictor of satisfaction in an automobile setting while affect was a better predictor in a classroom setting. Dube-Rioux (1990) showed that the affective response to a restaurant experience influenced satisfaction more than did restaurant performance, which is the basis for assessing the disconfirmation.

Westbrook and Oliver (1991), on the other hand, noted that a subgroup of their respondents reported a moderately high level of satisfaction despite infrequently experiencing positive affect. Given that satisfaction increases as the positive discrepancy increases, it may be possible that as the discrepancy becomes more positive, respondents were more likely to base their satisfaction on the discrepancy rather than the affective experience. In the context of an automobile purchase experience, Kennedy and Thirkell (1988) showed that, at a given level of discrepancy, the impact of the discrepancy on satisfaction is greater when it is positive than negative.

This raises interesting questions. Does the relative influence of the affective experience on satisfaction vary across levels of discrepancy? Is the impact of affective experience on satisfaction likely to be greater when the discrepancy is negative than when it is positive? We argue that as compared to the discrepancy, the relative impact of affect on satisfaction is moderated by whether the discrepancy is positive or negative. Our argument is based on the separate processes of positive and negative evaluation, and on the asymmetry between positive and negative events in leading to psychological responses (Cacioppo and Berntson 1994; Taylor 1991). The present study is intended to show that, in classroom settings, the extent to which the affective experience is predictive of satisfaction judgments varies across positive and negative discrepancy evaluations.

We begin with a brief review of the affective structures underlying the separation of positive and negative evaluations. We then suggest a model of the satisfaction process with respect to affective evaluation. Based on the positive-negative asymmetry, we develop hypotheses that specify the relative influence of affect on satisfaction judgments. Next, we describe the methodology used to test the hypotheses and discuss the results of our study. Finally, we discuss the limitations and implications of the study and suggest future research.

AFFECTIVE EVALUATION

Consumer satisfaction is most commonly defined as a post-choice evaluation, which varies along a hedonic continuum from unfavorable to favorable, in terms of whether or not the experience of a specific purchase was at least as good as it was supposed to be (Hunt 1977; Oliver 1981; Westbrook and Oliver 1991). According to this definition, satisfaction is distinguished from attitude, which represents a more generalized evaluation of a class of purchase objects. The definition also implies that satisfaction is a summary judgment incorporating both cognitive and hedonic evaluation and that affect is necessary for and antecedent to satisfaction (Mano and Oliver 1993; Westbrook 1987).

The most common approach in consumer research (Havlena and Holbrook 1986) to characterize affective structure is to measure people's subjective feelings in terms of underlying dimensions and to locate the feelings along the continuous dimensions (e.g., Daly, Lancee, and Polivy 1983; Mehrabian and Russell 1974). Following this approach, Russell (1979, 1980) contends that affective structure consists of two bipolar dimensions: pleasantness-unpleasantness and the degree of arousal or activation. However, Watson and Tellegen (1985) view affective structure in terms of positivity and negativity: positive affect represents the extent to which a person avows a zest for life, and negative affect refers to the extent to which a person reports feeling upset or unpleasantly aroused.

This hierarchical model of affect (Watson and Clark 1992; Watson and Tellegen 1985; Watson et al. 1999) assumes that positive and negative affect can exist concurrently: two broad higher order factors such as negative and positive affect are each composed of several distinct emotions, and these two levels of affect are not exclusive but rather coexist. Studies of individual affective experiences indicate that both positive and negative affective reactions can be evoked simultaneously in everyday life, suggesting that the major structural dimension of affective experience is the valence of positivity and negativity (Abelson et al. 1982; Bradburn 1969; Westbrook 1987). Events in life alternate between the positive and the negative, and instances of one do not preclude the occurrences of the other. Dual positive and negative affective reactions can be evoked during a consumption episode, and both positive and negative affect could be concurrent antecedents to satisfaction (Oliver 1993).

This line of thought implies that the activation of affective evaluation does not necessarily fall along the bipolar dimension of positivity and negativity. Instead, the activations of positive and negative evaluative processes are separable and have distinguishable antecedents and consequences (Cacioppo and Berntson 1994; Cacioppo and Gardner 1999). The distinctive activation of positive and negative evaluation in the affect system affords a further investigation of the asymmetry of positive and negative evaluation in the satisfaction process.

THE SATISFACTION PROCESS

According to the theory of cognitive affect (Frijda, Kuipers, and Schure 1989), affect is elicited when an event is processed in memory and is a function of cognitive appraisal and attribution. Given the internal arousal determined on the basis of situational cues, the cognition of arousal and the cognition of the source of arousal give rise to affective states (Schachter and Singer 1962; Weiner, Russell, and Lerman 1979). In consumption settings, arousal in post-purchase evaluation can be elicited from the perception of a discrepancy (or the lack of consistency) between performance and prior expectations.

Arousal elicited by the discrepancy may influence satisfaction in two ways. First, the cognition of arousal leads to affect and, in turn, affect is transferred to satisfaction. The associative network model of memory proposes that long-term memory consists of nodes and linkages (cf. Raaijmakers and Shiffrin 1992). Affective and/or cognitive cues contained in the node are transmitted through links to other nodes and are retrieved for an evaluative judgment, especially those needed to determine expectations. As satisfaction is a summary judgment incorporating affective and cognitive evaluations, the affective cues stored in the node constitute part of the summary judgment.

Second, arousal brings about causal inferences of the source of arousal, and satisfaction depends on how these inferences are made. The impact of causal inferences on satisfaction may be reflected by the resulting affect: whereas the cognition of arousal elicits a primitive positive or negative emotional reaction to the perceived success or failure of the outcome, the cognition of the source of arousal elicits differentiated emotional reactions to the causal attribution of the outcome (Weiner 1985b). Weiner notes that primitive emotions include *happy* associated with success and *frustrated* and *sad* associated with failure and that, for differentiated emotions, success perceived as due to good luck produces *surprise*, whereas success following a long-term period of effort expenditure results in a feeling of *calmness* or *serenity*. The satisfaction judgment is based on both the specific emotions driven by the causal inference and the primitive emotion driven by the cognitive appraisal of arousal (Oliver 1989).

The impact of causal inference may also moderate the effect of the discrepancy on satisfaction judgments. Causal inferences are made so that arousal may eventually be reduced, as organisms are motivated to terminate or prevent arousal (Weiner 1985a). Arousal may be reduced by discounting the cause of arousal, as causal explanations for negative events may be generated in a manner that minimizes the impact of those negative events (Taylor 1991). That is, causal attribution activity particularly under conditions of negative discrepancy appears to discount the cognitive evaluation of discrepancy between performance and prior expectations, and reduce its impact on the satisfaction judgment.

In sum, our view of the satisfaction process involves three processes: the cognitive appraisal of arousal elicits arousal-driven affect, which is transferred to satisfaction; the cognition of the source of arousal elicits attribution-driven affect, which is also a basis of satisfaction judgments; and attributions are made to reduce arousal and discount the discrepancy.

ASYMMETRIC EFFECTS OF AFFECT

Arousal may have more influence on responses to negative events than positive ones (Suls and Mullen 1981). Given the assumption that positive and negative motivational substrates operate separately, the negative motivational system tends to respond more intensely than the positive one to comparable amounts of activation (Cacioppo and Berntson 1994; Ito et al. 1998). Taylor (1991) reviewed evidence suggesting that negative events evoke more intense responses as well as more emotional reactions than do positive events. The asymmetric effect of negative events could be explained by evolutionary arguments from a behavioral-adaptive perspective (Peeters and Czapinski 1990): living organisms have a tendency to form positive hypotheses about reality; the positive bias soon encounters a detrimental interaction with the environment; thus, the tendency to expect the positive is allied with a strongly marked sensitivity for aversive stimuli. As driven by the cognitive appraisal of arousal, affective reactions to an event are more likely to be transferred to satisfaction judgments when the event leads to a negative discrepancy rather than to a positive discrepancy.

People engage in more thorough attributional processing for behaviors disconfirmed from a prior expectancy than for behaviors confirmed (Pyszczynski and Greenberg 1981; Taylor 1991). It has been well documented that negative events produce more cognitive activity and more complex cognitive representations and, in turn, elicit more causal thinking than do positive events (for reviews, see Dunegan 1993; Kelley and Michela 1980; and Peeters and Czapinski 1990). Given that the disconfirmed behavior leads to more arousal than the confirmed behavior, it is likely that the more thorough attributional processing is due to the greater tendency to reduce arousal. After showing that negative events elicited more spontaneous attributional activity than positive events, Weiner (1985a) explained this using the Law of Effect: organisms are motivated to terminate or prevent a negative state of affairs; effective coping importantly depends on locating the causes of failure; and, in this case, attributional search more clearly serves an adaptive function. As was argued previously, the spontaneous attributional activity stemming from the negative discrepancy is likely to discount the discrepancy and, thus, to decrease the impact of the discrepancy on the satisfaction judgment while increasing the relative impact of affect. However, when encountering positive events, people are not spontaneously motivated to find causal explanations of the event. Thus, when the discrepancy is positive, it is less likely to be discounted through the attribution process and, in turn, its relative impact on satisfaction judgment is less likely to be dominated by the impact of affect.

In sum, we propose that affect influences satisfaction more when the discrepancy is negative than when it is positive, that the discrepancy influences satisfaction less when the discrepancy is negative, and that the influence of affect on satisfaction is greater than the influence of the discrepancy, but only when the discrepancy is negative.

H1: Affect elicited in consumption is more predictive of satisfaction for the negative discrepancy group than for the positive discrepancy group.

H2: The discrepancy is less predictive of satisfaction for the negative discrepancy group than for the positive discrepancy group.
H3: For the negative discrepancy group, affect is relatively more predictive of satisfaction than the discrepancy.

METHOD

Overview

The study was conducted using course evaluations at the business school of a major private university in Korea. We chose to use course evaluation data to test the hypotheses for the following reasons: the separability of positive and negative evaluative processes was found to be valid in classroom settings (Goldstein and Strube 1994); past studies indicate that course evaluations involve an actual usage situation that generates various affective responses (e.g., Oliver 1993; Weiner, Russell, and Lerman 1979); and, compared to the experience of commodities in which cultural meanings could be embedded, course evaluations are expected to be less vulnerable to the influence of different cultural contexts on the satisfaction process.

Freshmen were not included in this study since they may have not established prior expectations due to a lack of experience and knowledge about college-level courses, and thus desire, instead of expectation, might be a reference point in the satisfaction judgment. Students who enrolled in core courses were not included in this study, because they may have attribution processes different from those used by students in elective courses. Courses were carefully sampled to avoid a duplication of respondents. The survey was conducted with the agreement of the instructor one week before the final exam so that the respondents were in a position to evaluate the course without bias stemming from the final grade. The respondents were told that the survey was conducted solely for the purpose of research and that their responses were not to be shared with the instructors. The sample size was 185 from eight courses.

Measures and Descriptive Statistics

To measure the discrepancy, the respondents were asked to evaluate the discrepancy between course performance and their expectations held at the time of enrollment for six attributes: textbooks/teaching materials, the content of lectures, assignments, discussion/presentations, instructor, and exams/quizzes. A seven-point scale was used to evaluate the discrepancy, varying from +1 to +3 for "better-than-expected" and from -1 to -3 for "worse-than-expected", with zero as a neutral point. The attribute-level scores were averaged to get a composite measure. The Cronbach alpha of the six items is .86. The mean value of the discrepancy is .23 (sd=1.08). Of the respondents, 47% reported a positive discrepancy, 44% reported a negative discrepancy, and 9% reported confirmation when the composite measure was used.

Satisfaction and dissatisfaction were measured by both unipolar and bipolar scales modified from Oliver's (1980) satisfaction measures (Table 1). First, five-point unipolar scales were used separately for measuring satisfaction ("5" indicating "very satisfied" and "1" indicating "never satisfied") and for measuring dissatisfaction ("5" indicating "very dissatisfied" and "1" indicating "never dissatisfied"), thus allowing the investigation of whether satisfaction and dissatisfaction are separate dimensions. Bipolar scales were also used to measure (dis)satisfaction on a continuum such that "5" indicated "very satisfied" and "1" indicated "very dissatisfied." The unipolar scales of satisfaction and dissatisfaction were factor analyzed in order to check their unidimensionality. All items loaded on a single factor, explaining 67% of the total variance. This result indicates that, in the present study and as suggested by Maddox (1981), satisfaction and dissatisfaction are not separate dimensions. Thus, the bipolar-scale scores are used in the following analyses. The Cronbach alpha of the bipolar items is .90. The mean (dis)satisfaction is 3.5 (sd=.85). This number is not necessarily a signal of respondents' satisfaction with the selected courses but could be a reflection of the positive response tendency frequently noted in satisfaction studies, where a "bunching" of respondents is found at the upper end of the satisfaction continuum (Westbrook and Oliver 1981, p. 95).

Table 1
Measures of Satisfaction

I am satisfied/dissatisfied with -
(1) my decision to take this course.
(2) my choice of this course.
(3) the experience I went through in this course.
(4) what I have got from this course.

A preliminary list of emotions pertinent to course evaluations was developed from past studies of affective structure in the US and Korean cultural contexts (Ahn, Lee, and Kwon 1994; Russell 1979; Watson and Tellegen 1985). The items were pretested in personal interviews with thirty students at the same university; these students were not included in the main study. Fourteen items were mentioned most frequently with respect to course evaluations, and thus were selected for the main study. Their intensity was measured on a five-point scale. Table 2 shows the factor patterns after varimax rotation. The three factors explain 69% of the total variance. The items loading on the first factor deal with positive affect, while the items loading on the other two factors deal with negative affect. It appears that the second factor deals with agitation-related negative affect, while the third factor deals with dejection-related negative affect. The factor structure of negative affect is in accordance with Higgins' (1987) suggestion that there is a need to distinguish agitation-related and dejection-related negative emotions. The Cronbach alpha is .90 for the positive affect, .86 for the agitation-related negative affect, and .78 for the dejection-related negative affect. The means (standard deviations) of the three affects are respectively 2.9 (sd=.80), 2.0 (sd=.92), and 2.8 (sd=1.1).

Respondents were asked to rate thirteen causes of the perceived discrepancy (Table 3). Five-point Likert-type scales were used ("5" indicating "strongly agree" and "1" indicating "strongly disagree") with the question of "The discrepancy is attributable to ______." These items were initially developed in the pretest to capture the attribution

Table 2
Factor Pattern of Affect

Variable	Factor 1	Factor 2	Factor3
pleasant	.84	-.17	-.10
fulfilled	.79	-.26	-.17
comfortable	.78	-.02	-.15
happy	.82	-.04	-.05
impressive	.61	-.29	-.12
interesting	.71	-.41	-.06
merry	.75	-.34	-.07
sorry	-.01	.21	.75
pitiful	-.11	.21	.82
regretful	.05	.02	.83
unpleasant	.18	.84	.08
disappointed	-.31	.76	.20
uncomfortable	-.21	.63	.56
angered	.26	.71	.39
Variance explained by each factor			
	4.31	2.74	2.54
	(30.8%)	(19.6%)	(18.1%)

process in terms of the locus of causality and controllability (Weiner 1985b). The varimax-rotated factor pattern shows that three factors are distinctive, explaining 67% of the total variance. The first factor appears to be instructor-related causes which are controllable by the instructor; the second factor appears to be institution-related causes which are not controllable by the instructor; and the third factor appears to represent self-related causes which can be controlled by the respondent in the long term but not in the short term. These results indicate that, in the respondents' attribution processes, the locus of causality is a distinctive attribution dimension in terms of both internal and external causes. On the other hand, the dimension of controllability is manifested only in external causes. The items of each factor were averaged to get a composite measure of each attribution, given the moderate levels of internal consistency (the Cronbach alpha for each factor was .89, .85, and .85 respectively). The mean value (standard deviation) of the composite measure was 3.0 (sd=1.08) for instructor-related causes, 2.6 (sd=.96) for institution-related causes, and 3.1 (sd=.90) for self-related causes.

Table 3
Factor Pattern of Attribution Measures

Variable	Factor 1	Factor 2	Factor 3
Student's			
capability	.06	.14	.79
academic ability	.18	.18	.85
endeavor	.12	-.01	.85
time invested	.04	-.10	.82
Instructor's			
capability	.89	-.14	.14
teaching ability	.89	-.12	.03
endeavor	.89	-.08	.11
time invested	.73	.19	.12
University system	-.13	.87	.01
Department's system	.05	.86	.03
Curriculum	.08	.72	.06
Administration	-.23	.80	.02
Prior belief	.19	.22	.15
Variance explained by each factor	3.07 (23.6%)	2.84 (21.8%)	2.81 (21.6%)

RESULTS

The respondents were divided into two discrepancy groups based on the upper- and lower-quartiles of the discrepancy scores. The quartiles were used so that each group's discrepancy would be significantly positive or negative beyond a zone of indifference (Wilson et al. 1989). The positive discrepancy group includes the upper 25% of the respondents and the negative discrepancy group includes the lower 21%. In the positive discrepancy group, the mean value of the discrepancy scores is 1.7 (sd=.55) with its range from 1.0 to 3.0, whereas in the negative discrepancy group, it is -1.1 (sd=.46) with its range from -0.67 to -2.83. The mean difference between the two groups is statistically significant (t=25.6, p<.0001).

Attribution

The attribution data were evaluated prior to the hypothesis tests in order to investigate whether Koreans have attributions different from those found in Western cultures. The positive-discrepancy group shows a stronger tendency to attribute discrepancy to self-related causes as well as to instructor-related causes than does the negative-discrepancy group. The mean value for the attribution to self-related causes is 3.3 for the positive-discrepancy group and is 2.8 for the negative-discrepancy group, and the difference is statistically significant (t=2.5, p<.05). The mean value for the attribution to instructor-related causes is 3.5 for the positive-discrepancy group and is 2.9 for the negative-discrepancy group; the difference is statistically significant as well (t=2.5, p<.05). On the other hand, the attribution to institution-related causes is significantly greater for the negative-discrepancy group than for the positive-discrepancy group (mean=2.9 vs. 2.3; t=2.8, p<.01).

In sum, the positive-discrepancy group

attributed the discrepancy to internal or person-related causes more than did the negative-discrepancy group, who showed a stronger tendency to attribute the discrepancy to external and uncontrollable causes. These results are in line with findings in Western cultural contexts regarding the role of beliefs about cause and effect, and about the role of motivation for self-enhancement. A person's positive behavior has potential for the enhancement of self-esteem if he/she is causally responsible for it (Folkes 1988; Kelley and Michela 1980). This predicts that success is attributed more to the person while failure is attributed more to circumstances, and that attributions for success are usually internal while attributions for failure are relatively external. Thus, we conclude that cultural differences do not lead to unique attributions in the satisfaction domain studied here.

Hypothesis Tests

To test H1, we used a regression model in which the dependent variable is satisfaction and the independent variables are the three affect variables. This model was estimated separately for the positive and negative discrepancy groups (Table 4). Then, the difference in multiple correlations (R) between the two groups was tested using the Fisher (1921) r-to-z transformation. The multiple correlation is 0.60 for the positive discrepancy group and is 0.81 for the negative discrepancy group. The difference is significant at $p<.05$ ($z=1.92$) in a one-tailed test, indicating that affect elicited in the course was more predictive of satisfaction when the discrepancy was negative than when it was positive. Thus, H1 is supported.

To test H2, the correlation between discrepancy and satisfaction of the positive discrepancy group ($r=.57$) was compared with the correlation of the negative discrepancy group ($r=.34$). In a one-tail Z-test, the difference between the two correlations was marginally significant at $p<.10$ ($z=1.34$). This indicates that the discrepancy was less predictive of satisfaction when the discrepancy was negative than when it was positive. Thus, H2 is supported.

To test H3, we used a standard regression model in which the dependent variable is satisfaction and the independent variables are the three affect variables and discrepancy. As shown in Table 4, in the positive discrepancy group, there was a significant effect for discrepancy ($\beta=.34$, $t=2.5$, $p<.05$) and positive affect ($\beta=.48$, $t=3.1$, $p<.01$) on satisfaction. On the other hand, in the negative discrepancy group, discrepancy did not have a significant effect on satisfaction while positive affect ($\beta=.55$, $t=4.6$, $p<.001$), dejection-related negative affect ($\beta=.43$, $t=4.0$, $p<.001$), and agitation-related negative affect ($\beta=-.30$, $t=2.7$, $p<.05$) did have significant effects. [The positive coefficient of dejection-related negative affect may appear to be counterintuitive. As an explanation, we speculate that dejection-related negative affect was elicited by the attribution of the negative discrepancy to the self (regret) or to uncontrollable causes (pity) and, in turn, mediated the effect of the negative discrepancy in a manner that reduced dissatisfaction. The two negative affect variables do not appear to be collinear in the negative discrepancy group, as $r=.26$ (see Table 5). The possibility that agitation-related negative affect could be a suppressor variable seems to be less persuasive because the correlation between dejection-related negative affect and satisfaction was also significantly positive.] These results indicate that, relative to the discrepancy, affect is more predictive of satisfaction when the discrepancy is negative but not when it is positive. Thus, H3 is supported.

DISCUSSION

Affect elicited in a classroom setting is more predictive of satisfaction when the evaluation of discrepancy between perceived performance and expectation is negative rather than positive. Relative to the discrepancy, affect becomes more predictive of satisfaction as the discrepancy becomes more negative. Findings are in line with past research on the independent effect of affect

Table 4
Results of Regression Analyses

Dependent Variable: Satisfaction

Group: Positive Discrepancy Group

Model	f (PA, NA(d), NA(a)) $R^2 = .36$; $F(3, 42)=7.9$, $p<.0001$			f (DIS, PA, NA(d), NA(a)) $R^2 = .45$; $F(4, 41)=8.2$, $p<.0001$		
Variable	ß	t	p	ß	t	p
DIS	-	-	-	.34	2.5	<.05
PA	.67	4.6	<.001	.48	3.1	<.01
NA(d)	.10	.61	ns	.08	.57	ns
NA(a)	.09	.54	ns	.07	.45	ns

Group: Negative Discrepancy Group

Model	f (PA, NA(d), NA(a)) $R^2 = .66$; $F(3, 33)=21.4$, $p<.0001$			f (DIS, PA, NA(d), NA(a)) $R^2 = .66$; $F(4, 32)=15.6$, $p<.0001$		
Variable	ß	t	p	ß	t	p
DIS	-	-	-	.04	.34	ns
PA	.56	5.3	<.0001	.55	4.6	<.0001
NA(d)	.43	4.1	<.001	.43	4.0	<.001
NA(a)	-.30	2.8	<.01	-.30.	2.7	<.01

DIS: Discrepancy,
PA: Positive Affect
NA(d): Negative Affect (dejection-related)
NA(a): Negative Affect (agitation-related)

Table 5
Correlations of Key Variables

Variable	1	2	3	4	5	6
1. Performance	-	.64	.54	-.32	-.32	.61
2. Discrepancy	.42	-	.51	-.15	-.23	.57
3. Positive affect	.54	.42	-	-.41	-.53	.58
4. Negative affect (dejection-related)	.40	-.00	.07	-	.60	-.12
5. Negative affect (agitation-related)	.03	-.12	-.27	.26	-	-.22
6. Satisfaction	.53	.34	.68	.40	-.35	-

The numbers of upper-diagonal are the correlations for the positive-discrepancy group.
The numbers of lower-diagonal are the correlations for the negative-discrepancy group.
Correlation greater than .40 is statistically significant at p<.01.
Correlation greater than .30 is statistically significant at p<.05.

on satisfaction judgments (e.g., Mano and Oliver 1993; Oliver 1993; Westbrook 1987). The present study extends past studies in that the relative impact of affect is investigated under positive versus negative discrepancies. The present study implies that the asymmetrical effect of positive and negative events in one's daily life can be applied to the domain of satisfaction, such that affect has greater impact on satisfaction when the consumption experience is discrepant from prior expectations in a negative direction.

The present findings on the asymmetrical effects of affect on satisfaction may provide insight on post-purchase information processing, in the sense that satisfaction is an evaluative judgment formed by usage experience. In this study, the judgment of satisfaction is affectively based when the discrepancy is negative. Millar and Millar (1990) showed that rational advertisements were more effective in changing evaluative judgments when these judgments were affectively based and, alternatively, emotional advertisements were more effective when the judgments were cognitively based. Thus, given that dissatisfaction judgments are dominated by affective experience rather than cognitive evaluation, rational advertisements may be more effective in persuading consumers who were dissatisfied with the previous purchase than would emotional advertisements.

The post-experience information processing of satisfied and dissatisfied consumers merits additional study. It has been suggested that previous negative experiences increase one's motivation to learn in order to avoid future negative outcomes (Smith-Jentsch et al. 1996). After experiencing negative events, people tend to focus their attention more on features which provoke negative states than positive states, and negative features are weighted more heavily in the formation of an overall evaluation than are positive features (Ganzach 1995; Peeters and Czapinski 1990; Sanbonmatsu and Kardes 1988; Skowronski and Carlston 1989). Furthermore, this negativity bias appears to be manifested more under agitation-related negative states than under dejection-related negative states (Taylor 1991). Given information about a product he/she has experienced, a consumer may process the information in a different manner depending on whether the product experience was satisfactory or unsatisfactory and, if dissatisfaction is experienced, on whether the experience was accompanied by agitation-related affect or dejection-related affect. This line of thought calls for further research on the modes of satisfaction (e.g., Fournier and Mick 1999) as well as their impact on subsequent judgments.

There are some limitations to this study. First, the amount of discrepancy was not controlled. The equivalency of positive and negative discrepancy is needed to provide more conclusive evidence, although equivalency is not usually warranted in real consumption settings. Concerning this issue, one might consider using an experimental setting that manipulates both performance and its comparison standard on the same interval scale, such as a gain or a loss in dollar amounts in a stock market context (Oliver and DeSarbo 1988).

A second limitation is the effect of prior expectations on satisfaction, as we could not measure prior expectations. Some studies suggest that expectation has a separate effect on satisfaction (Oliver 1980; Tse and Wilton 1988). However, the effects of prior expectations may not operate in the context of a continuing service (Bolton and Drew 1991). Oliver and DeSarbo (1988, p. 496) noted that the effects of prior expectation decay over the purchase interval, and this may be particularly true when disconfirmation is negative. However, future research needs to consider the evolving process of expectation formation during usage experiences and its role in the satisfaction judgment (Fournier and Mick 1999; Stayman, Alden, and Smith 1992).

Finally, this study is not free from concerns of external validity as it was conducted in the Korean cultural context. In general, the Korean culture is relatively collectivistic and is a high-context culture while the North American culture is individualistic and low-context (Hall 1976; Hofstede 1983; Triandis 1990). In spite of the different cultural characteristics in general, some of our findings suggest there are common grounds in the consumer satisfaction process between the two cultures. For instance, the causal attribution of discrepancy was more internal and person-oriented under positive discrepancy while it was more circumstance-oriented under negative discrepancy. These findings are in line with the established theories and evidence found in Western cultures (Folkes 1984; 1988; Oliver 1993; Weiner 1985b). However, recent research indicates that cultural variations exist in attributional processes, particularly with respect to the attribution of observed behavior to personal dispositions and/or social situations (Choi, Nisbett, and Norenzayan 1999; Menon et al. 1999; Morris and Peng 1994; Ybarra and Stephan 1999). As most consumer satisfaction research has been conducted in a North American cultural context, little is known about the similarity of or divergence in consumer satisfaction processes across cultures. There should be further research on consumer satisfaction processes from a cross-cultural perspective.

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DEGREE OF FRAILTY AND ELDERS' SATISFACTION WITH PERSONAL CARE SERVICES IN A COMMUNITY SETTING

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ABSTRACT

This study assesses the characteristics that influence elders' satisfaction with community-based long-term care services. Satisfaction is modeled as being impacted by personal characteristics, functional status, characteristics of service and characteristics unique to health care service. The results indicate that characteristics of service have the largest impact on the satisfaction with community-based care services for all elders. However, functional status separates elders into two distinct populations. For the less frail elders, the ability to discuss medical information about their particular health condition has the most impact on satisfaction with their health care service. For the more frail elders, the ability of their health care provider to be on time has the greatest impact on satisfaction.

INTRODUCTION

The number of elders in the U.S. population increased eleven-fold during the past century, reaching 33 million by its end (Hobbs, 1999), with the oldest old (those age 85 and over) being the fastest growing segment (Neugarten, 1996). Increasing age increases the likelihood of needing assistance due to functional impairment (Wieland, Ferrell, and Rubenstein, 1991), and, while most elders are not acutely ill, many are frail and require assistance performing daily activities (Regnier and Overton, 1997). At the same time we see an increase in the population of elders, the provision of long-term care has shifted from institutional care settings to individuals' homes. This increased use of home- and community-based long-term care services has been fueled by a number of factors, the most important of which is the desire of individuals to remain in their homes for as long as possible (Hohl, 1994).

Because of the nature of community-based long-term services, managing the quality of care can be difficult, as compared to institutional settings (Peters, 1992). Continued quality assessments must be performed to assure the quality of the care being provided. There are many ways to measure the value of services, ranging from supply side measures, such as cost containment and physician accounts, to demand side measures, including client satisfaction, their improved functional status, and reduced need for health care utilization. However, much previous research has focused on supply side measures such as physician accounts. While the assessments of the quality of home- and community-based services is also important, consumer satisfaction, if included at all, is generally a small part of the equation (Beaulieu, 1991; Brook, McGlynn, and Cleary, 1996). Davies and Ware (1988) and Mirvis (1998) share the belief that patient assessments offer a unique perspective, which is unobtainable from other sources. Health service researchers have noted the importance of including consumer evaluations, such as satisfaction surveys, into quality assessments (Miller-Hoehl, 1992; Monk and Cox, 1993; Wensing, Grol, and Smits, 1994).

In this study, we estimate client satisfaction with community-based personal care services. The satisfaction model is based on the literature from service quality, patient satisfaction, physical functioning, and health care use. Through the integration of these diverse literature bases, we hope to provide a more comprehensive understanding of what influences the satisfaction of clients of long-term community-provided care. Specifically, the objectives of this study are to assess what qualities of community-based long-term care services impact elders' satisfaction and to determine whether there is a difference in the satisfaction between elders at two levels of frailty.

LITERATURE REVIEW

Relatively early literature in the health area suggests that satisfaction is influenced by aspects of care that are specific to the health care experience (Abramowitz, Cote, and Berry 1987; Cleary and McNeil 1988; Doering 1983; Russell 1990; Strasser, Aharony, and Greenberger 1993; Woodside, Frey, and Daly 1980). Communication with physicians has been shown to increase satisfaction with care (Buller and Buller, 1987; Kolodinsky and Shirey, 1999). Beatty et al. (1998) found that the availability of and amount of control over health care assistants were significantly associated with satisfaction. There now appears to be a consensus that patient satisfaction is a multidimensional concept (Gilleard and Reed 1998; Geron, 1997; Kolodinsky, 1995; 1997; Russell, 1990; Strasser, Aharoney, and Greenberger, 1993; Ware et al., 1983; Yucelt, 1994). However, we also know that consumers can form summary judgments regarding their care (Aharoney and Strasser, 1993; Kolodinsky and Shirey, 1999; Strasser, Aharoney, and Greenberger, 1993).

Research into elders' satisfaction with care has generally focused on the personal aspects of the client and the impact that has on satisfaction. For example, age has been shown to be positively associated with satisfaction of care (Corrigan, 1990; Rabiner, 1992). Hulka et al. (1975) found that men are less likely to be satisfied with health care than women, and that individuals living alone were least likely to be satisfied with both the professional competence of their care and personal qualities of their physician. Having Medicaid, which implies a lower income level, was found to increase the odds of satisfaction with the global quality of care (Lee and Kasper, 1998). Decreases in physical functioning have also been shown to increase satisfaction with health care (Rabiner, 1992).

In examining clients' satisfaction with home-based care, models of quality assessment in the consumer area can add to understanding. The early work of Berry, Zeithaml, and Parasuraman (1985) identified ten *general* determinants of service quality, including reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer, and tangibles. This research led to the development of a measurement tool for service quality (SERVQUAL), a 22-item scale covering 5 dimensions of quality: tangibles, reliability, responsiveness, assurance, and empathy (Berry, Zeithaml, and Parasuraman, 1985). While this instrument was not specifically designed for the analysis of health care quality, the dimensions captured in SERVQUAL represent aspects of service that are easy for consumers to evaluate, and have also been shown to be important indicators of health care quality. Soloman et al. (1985) note that for the majority of service encounters, including health care services, no tangible object is exchanged; therefore the consumer is left to evaluate the experience based solely on the service provider.

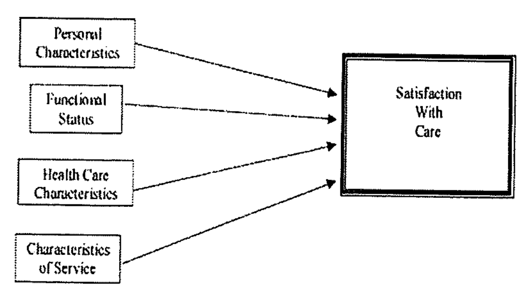
While research into patient satisfaction with long-term care is expanding, the number of articles that has focused on community-based care is limited. Kolodinsky (1995, 1997, 2001) identified other influencing factors related to health care services based on Aday and Andersen's (1974) Behavioral Model of Health Care Utilization. The unique characteristics related to health care include the availability of care, communication with the care provider, and the amount of control over the care provider. Geron et al. (2000) identify some problems with current research into home- and community-based long-term care. These include the fact that many research instruments are simply adapted from instruments used to measure satisfaction with medical care. Another shortcoming is the use of single item global satisfaction measures which fail to capture the complexity of many of the services provided through home- and community-based care. In addition, the majority of measures available are based on the perspectives of researchers or providers, and not the perceptions of the recipients of care (Geron et al., 2000). Geron (1997) has developed an instrument to measure the quality of care, specific to long-term care settings, with the emphasis on the structure and process of care (Brook et al., 1996). Structural issues relate to the setting, timing, and services offered, while process issues relate to communication between provider and client and include information flow, interpersonal communication, and respect.

Studies in gerontology often focus their analyses on frail elders as a subpopulation. In the satisfaction literature to date, level of frailty, as measured by functional ability using measures such as limitations of activities of daily living (ADLs), instrumental activities of daily living (IADLS), falls, and chronic conditions are treated as "intercept shifters." That is, the effect of frailty is assumed to have no joint effect with other variables that impact satisfaction (Kolodinsky, 2001; Lee and Kasper, 1998; Rabiner, 1992; Benjamin and Matthias, 2001). Findings support the possibility that frailty both increases (Rabiner, 1992; Kolodinsky, 2001) and decreases (Benjamin and Matthias, 2001; Kolodinsky and Shirey, 1999) satisfaction. Given that there is no reliable evidence of the effect of frailty on satisfaction, this study tests the possibility that less and more frail samples represent two different populations of elders.

CONCEPTUAL MODEL

The general framework used to predict elders' satisfaction with long-term community-based care begins with Aday and Andersen's (1974) Behavioral Model of Health Care Utilization, which is used widely in the gerontology literature. According to the model, health care system *use* is impacted by health care policy, personal characteristics, characteristics of the health care system, and utilization of health care services. When one examines the patient satisfaction literature, many of these same categories are included as inputs into satisfaction (See, for example, Kolodinsky and Shirey, 1999; Rabiner, 1992). In this study we predict satisfaction with community-based care services as an outcome based on personal characteristics of individuals, functional status, characteristics of service, and characteristics unique to health care service (See Figure 1). Characteristics of service form the linkage between this model and the service quality framework. This conceptualization moves the behavioral model forward. No longer is the output of service utilization the final step in the model. We assert that the final outcome of the behavioral model is satisfaction with services.

Figure 1
Conceptual Model of Health Care Satisfaction



DATA

Data for this study are from the Florida State Department of Elder Affairs. In 1999, a study was commissioned specifically to examine elders' satisfaction with a variety of home-based services. The general purpose of the study was to use the information to improve the quality of home-based care for clients. This study focuses on personal care services. A total of 1,071 interviews were completed, of which 298 asked questions specifically about personal care services, including overall satisfaction and service quality, demographic characteristics of the care provider and receiver, amount of care received compared to amount of care needed, and presence of an informal caregiver.

MEASURES

Dependent Variable

The dependent variable is whether, regarding perceived personal care services, the client is very satisfied versus not very satisfied. This variable was created from a five point Likert scale. Those responses that were reported being very satisfied were coded as a one and zero otherwise. The literature consistently shows that elders report being quite satisfied with health care (Biesecker, 1988; Biesecker and Biesecker, 1996). There are various explanations for this result. Some believe that elders are afraid to report dissatisfaction because they may lose care services. Others speculate that elders are happy to receive care, regardless of the quality. Our data are no different. In our sample 90% of the respondents reported being satisfied or very satisfied, with 50% being very satisfied, 40% being satisfied, and the remaining 10% being neutral, dissatisfied, or very dissatisfied. We think the 50% who say they are very satisfied are definitely satisfied. And we think the 10% who are neutral or dissatisfied are definitely not satisfied. We think the 40% who say they are satisfied are a combination of unknown proportions of people who truly are satisfied and people who are overclaiming satisfaction. Opting to be conservative, we included all of the 40% who are "satisfied" in the unsatisfied group. We realize that this reduces our likelihood of finding significant differences between the two groups given that the "unsatisfied" group probably has a substantial number of misclassified respondents. However, we can be reasonably sure that whatever difference we find are true differences. We hope the reader is not offended by our conservative approach. We preferred this approach over dropping the 40% from the sample and comparing the 50% "very satisfieds" with the 30% "not satisfieds."

Independent Variables

To measure the perceived quality of care, a multi-item measure is developed based on SERVQUAL (Berry, Zeithaml, and Parasuraman, 1985) and modified for long-term care services (Lee, 2000) using the frameworks of SERVPERF (Cronin and Taylor, 1992; Geron 1997). The variables included in multivariate analysis are factors that were formulated using principle components analysis with Varimax rotation based on client responses to twelve statements regarding characteristics of their care. The factors are consistent with the items identified by previous research in the area of satisfaction with medical services and include satisfaction with the dependability of caregivers (DEPEND) (Kolodinsky and Shirey, 1999), courtesy, respect and communication (SERVQUAL) (Kolodinsky and Shirey, 1999; Ware et al., 1978), scheduling and timeliness (SCHED and ONTIME) (Aharoney and Strasser, 1993; Cleary and McNeil, 1988; Kolodinsky and Shirey, 1999; Russell, 1990; Ware et al., 1978), and communication of information with caregivers (INFORM) (Buller and Buller, 1987; Kolodinsky and Shirey, 1999; Laferriere, 1993; Ware et al., 1978).

The characteristics unique to health care services are included as suggested by Kolodinsky (1995, 1997, 2000). First, MEDCAID indicates that the respondent receives Medicaid, (Hulka et al., 1975; Lee and Kasper, 1998). Second, ADEQUATE, a variable that was computed using number of hours of care provided minus number of hours of care needed, is included to indicate the adequacy of care availability. This is a continuous variable that can range from a positive to negative number of hours. Third, INFORM2 is a dummy variable coded as one if an informal caregiver is available to substitute for formal care and zero otherwise. Fourth, MOBILITY is a measure of whether the client is able to leave the house one or more times a week and is coded as 1 if the answer is yes and zero otherwise.

The following variables capture the personal characteristics of the client: age, gender, race,

Table 1
Rotated Component Matrix Factor Loadings

Statement	DEPEND	ON TIME	SERVQUAL	INFORM	SCHED
Your personal care aid listens to your suggestions.	.86				
Your personal care aide is dependable.	.73				
Your personal care aide arrives late.		.86			
Your personal care aide leaves too early.		.77			
You feel safe with your personal care aide.			.71		
Your personal care aide is consistently courteous.			.78		
Your personal care aide respects your privacy.			.77		
Your personal aide respects your personal belongings.			.85		
You received adequate information regarding personal care services.				.85	
You know about all of the services your personal care aide is supposed to provide.				.79	
Personal care services are available when you need them.					.43
Personal care aide comes at times that are convenient for you.					.65

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 9 iterations. Cumulative percent of variance explained: 76.47.

education, and income. AGE is included (Kane, Maciewjewski, and Finch, 1997; Kolodinsky and Shirey, 1999; Rabiner, 1992). GENDER is a dummy variable that represents if the respondent is male (Kolodinsky and Shirey, 1999; Lee and Kasper, 1998; Rabiner, 1992). The variables BLACK and WHITE are dummy variables coded as 1 if the client is of that racial category and zero otherwise. Hispanic is the left out category. The variables GHS and LHS are dummy variables that are coded as one if the client has had greater than or less than a high school education, respectively and zero otherwise. The left out category is having a high school education. INCOME is a dummy variable, coded as 1 if a client indicated their income was less than adequate to meet

Table 2
Descriptive Statistics

Variable	Definition	All	Low Risk	High Risk
Characteristics of Service				
DEPEND	Factor: dependability	0.0	-.004	.11
SERVQUAL	Factor: service personnel quality	0.0	-.003	.007
ONTIME	Factor: caregiver on time	0.0	-.006	.11
SCHED	Factor: accessibility	0.0	-.008	.001
INFORM	Factor: information	0.0	-.007*	.16*
Characteristics Unique to Health Care Service				
MEDICAID	Receives Medicaid	.55	.539	.584
ADEQUATE	Amount of care received adequate (difference in minutes of care)	-105.95	-85.25	-153.93
INFORM2	Presence of informal caregiver	.42	.394	.477
MOBILITY	Gets out of house > 1 time per week	.64	.64	.63
Personal Characteristics				
AGE	Age divided by 10	78	78	78
GENDER	1=FEMALE	.84	.87	.80
BLACK	Race is black	.21	.216	.202
WHITE	Race is white	.75	.755	.73
GHS	Greater than high school education	.27	.272	.247
LHS	Less than high school education	.28	.293	.27
INCOME2	Income adequate to meet expenses	.44	.429	.50
RISKDUM	1= high risk	.30		
SATISFAC	**Dependent Variable**	.52	.50	.55
N		232	204	88

* = Sig. <=.10; ** = Sig. <=.05; *** = Sig. <=.01

expenses and zero otherwise. RISKDUM is also a dummy variable, coded as one if client is high risk of nursing home placement and 0 otherwise.

Two Different Levels of Frailty

One of the objectives of this study is to determine whether there is a difference in the satisfaction between the elders at two levels of frailty. Thus, as a proxy for frailty, the Florida Department of Elder Affairs' measure of risk of nursing home placement is employed. A risk score is calculated based on the number of activity of daily living limitations (ADL), the number of instrumental activity of daily living limitations (IADL), and the degree to which a client requires help with those limitations. The number of ADLS and IADLS are multiplied by the degree of help needed and summed. This score is combined with a client's self assessed health rating, and their caregiver situation. Due to small sample size, we collapsed two highest risk categories into "high risk" and the three lower categories into "lower risk" of nursing home placement. An "average" lower risk client has three to four IADLS that require some help and 1 ADL that requires some help. Their self-assessed health is fair. If they have an informal caregiver, the caregiver is younger than 66 years of age and is in good health. An "average" higher risk of nursing home placement client has more than 1 ADL that requires total help and more than 5 ADLS that require total help. Their self-assessed health is poor. If they have an informal caregiver present, the caregiver is over age 66 and in poor health. Descriptive statistics are included as Table 2. This table highlights all respondents, as well as low and high risk for nursing home placement respondents.

Statistical Model

Because our satisfaction measure compares those who are very satisfied compared to others, our dependent variable is bi-nomial with two possible responses. Bi-nomial logit is the appropriate statistical model to use. In addition, we hypothesize that physical functioning is related to how one forms one's judgment of satisfaction. Therefore, we run two different models, one on a less frail sample and one on a more frail sample.

RESULTS

Results of the bi-nomial logit analysis are presented as Table 3. Three service quality factors influenced the satisfaction of both levels of frailty: service personal quality, dependability and the caregiver being on time. For the higher risk clients the promptness of the caregiver has a much greater effect on satisfaction then with the lower frailty clients. However, the lower frailty clients were more influenced by the dependability of the health care worker. Both levels were equally affected by the service personnel quality factors.

Low Level of Frailty

For those with lower nursing home placement risk all of the service quality factors significantly and positively impacted being very satisfied. Scheduling and being on time had the least impact; individuals at the average factor scores for those variables had about a one and a half times (1.64, 1.53) greater probability of being satisfied. Service personnel quality had the next greatest impact on satisfaction. Those at the average factor score were about two times (1.97) more likely to be satisfied with personal care services. Dependability and information were the most important characteristics. Clients at the average for those factor scores had a three point three and five times (3.3, 5.68) greater probability of being satisfied. It is also important to note that in the lower risk level clients, those who's income was adequate to meet expenses were half (.45) as likely to be satisfied with their health care. Finally, of the less frail population, age effects satisfaction, the older clients are one and a half times (1.59) more likely to report being satisfied with the health care they are receiving. Characteristics unique to the health care system did not effect their satisfaction with the overall quality of care.

High Level of Frailty

For the higher risk of nursing home placement clients, dependability and being on time had the greatest positive impacts. These clients were three times (3.03) more likely to be satisfied if their caregiver was dependable and two and a half times (2.49) greater probability of being satisfied if their caregiver was on time. Service personal quality factors had the next greatest influence on satisfaction. Clients at the average factor score

Table 3
Estimation Results

Variable	Definition	B (SE)	EXP β	B (SE)	EXP β	B (SE)	EXP β
		All		Low Risk		High Risk	
Characteristics of Service							
DEPEND	Factor: dependability	.93 (.20)***	2.51	1.19 (.28)***	3.30	1.11 (.41)***	3.03
SERVQUAL	Factor: service personnel quality	.57 (.19)***	1.73	.68 (.25)***	1.97	.68 (.37)*	1.98
ONTIME	Factor: caregiver on time	.53 (.17)***	1.76	.43 (.20)**	1.53	.01 (.32)***	2.49
SCHED	Factor: accessibility	.38 (.19)*	1.42	.49 (.25)***	1.64	.32 (.37)	
INFORM	Factor: information	1.13 (.22)***	2.98	1.73 (.35)***	5.68	.52 (.36)	
Characteristics Unique to Health Care Service							
MEDICAID	Receives Medicaid	.05 (.33)		-.13 (.43)		-.26 (.70)	
ADEQUATE	Amount of care received adequate	-.0009 (.0005)*	.99	-.007 (.001)		-.0009 (.0007)	
INFORM2	Presence of informal caregiver	-.07 (.33)		-.56 (.46)		.08 (.61)	
MOBILITY	Gets out of house > 1 time per week	-.002 (.34)		-.35 (.45)		.30 (.67)	
Personal Characteristics							
AGE	Age divided by 10	.34 (.20)*	1.46	.46 (.25)**	1.59	.56 (.50)	
GENDER	1=female	.88 (.46)*	2.41	.54 (.64)		1.04 (.81)	
BLACK	Race is black	-1.02 (.94)		-.77 (1.79)		-.98 (1.33)	
WHITE	Race is white	-.76 (.89)		-.69 (1.73)		-.11 (1.21)	
GHS	Greater than high school education	-.06 (.39)		.64 (.53)		-1.42 (.76)	
LHS	Less than high school education	-.52 (.38)		-.10 (.47)		-1.39 (.88)*	.25
INCOME2	Income adequate to meet expenses	-.46 (.32)		-.79 (.43)*	.45	.29 (.58)	
RISKDUM	1= high risk	-.31 (.35)					
Constant		-1.84 (1.87)		-2.05 (2.63)		-3.72 (4.10)	
N		239		165		74	
Log-Likelihood		247.34		151.65		77.45	
Chi-Sq.		83.77***		77.11***		24.64**	

* = Sig. <=.10; ** = Sig. <=.05; *** = Sig. <=.01

were almost twice (1.98) as likely to be satisfied with their health care. Characteristics unique to the health care system did not effect their satisfaction with the overall quality of care. Most of the personal characteristics of the client did not influence their satisfaction except elders with more then a high school education were one quarter (.25) less likely to be satisfied with their long- term care.

DISCUSSION

The objectives of this study are to assess what qualities of community-based long-term care services impact elders' satisfaction and to determine whether there is a difference, in the qualities that satisfy, between elders at two levels of frailty. We found that for all those interviewed, the greatest impact on satisfaction were factors dealing with the service quality: specifically, characteristics of the health care provider. All the characteristics included in the service quality evaluations related to behaviors the caregiver or agency responsible for providing care could influence. This finding supports previous research in service and quality indicating the service provider is the focus of evaluation (Bitner et al., 1990; Solomon et al., 1985). We also found that the level of frailty, which was previously shown to have no joint effect with other variables that impact satisfaction (Kolodinsky, 2001; Lee and Kasper, 1998; Rabiner, 1992; Benjamin and Matthias, 2001), actually separates the elders into two populations. Both levels of frailty identify different qualities of the health care service as having a greater influence on satisfaction.

It is important to note that there are three characteristics that have a strong influence on both populations. All three are aspects of delivering service that can be somewhat controlled by the provider. Thus, for organizations wanting to improve the quality of care they provide clients, it appears there is room for improvement, and it lies with the actions of the caregiver.

First is satisfaction with the punctuality of the caregiver. Being on-time is more important for the more frail group, though even the less frail group is 1.53 times more likely to report being very satisfied if their caregiver arrives on time. For the more frail group, being on time could influence their functioning throughout the day if they need help with dressing, bathing, and carrying out other activities of daily living. The on time component of providing care is perhaps the easiest to control by a health care organization.

Second is satisfaction with the quality of interaction between the client and caregiver in the form of a client feeling safe, their property and privacy being respected and being courteous. Training of caregivers as to the importance of these qualities in a caregiver and in how to deliver these qualities to clients will improve overall satisfaction with care ratings by clients.

Third is satisfaction with the overall dependability of the health care. Highlighting this characteristic as an essential quality for the health care provider to possess would increase client satisfaction across both levels of frailty. In this study, dependability goes beyond being on time, as suggested by the statements about punctuality and dependability loading on two different factors. It seems that it is very important for caregivers to listen and follow through on suggestions made by clients, and this is more important for those at lower levels of frailty. These individuals likely value the autonomy they have and perhaps need to feel more in control of their care than those who are more frail. The difference in the likelihood between the two frailty groups of reporting being very satisfied, however, is only .3. This aspect of service is controllable by the caregiver, but perhaps not as easily as punctuality or treating people with respect. This characteristic involves more two way communication between the client and caregiver.

This study brings to light a number of issues surrounding community-based long-term care services and the elderly population. First, this research supports past research (Beatty et al., 1998; Buller and Buller, 1987; Kolodinsky and Shirey, 1999; Kolodinsky, 2001) that states characteristics of the health care system, particularly those related to the service provider, have a large impact on the satisfaction of individuals receiving the service. However, it combines this information with the new concept that levels of frailty guide what qualities influence satisfaction with health care services. The elderly population is not homogeneous. While this has been noted in previous research (Kolodinsky, 2001; Owens and Batchelor, 1996), we have highlighted in this study that clients with different levels of frailty focus on different qualities more heavily when evaluating their satisfaction with health care services. For the lower risk group being able to communicate about medical information with the care provider had the most impact on satisfaction of service. The results point to the possibility that these clients want their health care provider to be able to discuss their particular health conditions. The higher risk group shows that the care provider's ability to be on time has a high impact on satisfaction. These clients need assistance with daily tasks and promptness of the health care provider affects not only their immediate personal health care needs but also their daily productivity.

While past research has shown that personal characteristics of the client impact satisfaction, this research shows that those personal characteristics only significantly affect elders with a lower risk level. The results from the lower nursing home risk clients support the notion that older adults tend to report higher levels of satisfaction with care than do younger adults (Corrigan, 1990; Owens and Batchelor, 1996; Rabiner, 1992). This may be the result of the younger age group's difficulty in accepting their need for care. Also for lower risk clients, those reporting that income was adequate to meet expenses had a lower probability of being satisfied, signifying they may have other choices for care, or higher expectations. It is important to note that the higher frailty clients follow none of these trends. Personal characteristics show no impact on satisfaction with the health care received, with the exception of those not having completed high school.

There are differences as to what characteristic most impacts satisfaction between the two different levels of frailty. Health care providers should take into account these differences when working with clients. The statistical findings in this study of both the service quality factors and the level of frailty of elders have applicability for improving the personal care services that elders receive in their home.

Important conclusions can be drawn from this research. However, it is important to note that there are limitations to be acknowledged. The data were from a single state, although the state contains the largest count of elders in the country. This weakness, however, could turn into a strength if future research is conducted. By following one agency through time, future research could identify whether there is a change in the level of satisfaction of elders if changes in the training of caregivers is made that incorporate the findings of this study.

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