

Satisfiers, Dissatisfiers, Criticals, and Neutrals: A Review of Their Relative Effects on Customer (Dis)Satisfaction

Stephen L. Vargo

University of Hawai'i

Kaori Nagao

AngeLiKa Promotions, LLC

Yi He

University of Hawai'i

Fred W. Morgan

University of Kentucky

Stephen L. Vargo is a Shidler Distinguished Professor and Associate Professor of Marketing, Shidler College of Business, University of Hawai'i. Kaori Nagao is the President of AngeLiKa John Robert Powers School, Las Vegas. Yi He is a Doctoral Candidate, Shidler College of Business, University of Hawai'i. Fred W. Morgan is a Professor of Marketing, Gatton College of Business & Economics, University of Kentucky. Please send all correspondence regarding this manuscript to Stephen L. Vargo, Shidler College of Business, University of Hawai'i, 2404 Maile Way, BusAd 303, Honolulu, HI 96822, Office: (808) 956-8167, Fax: (808) 956-9886, E-mail: svargo@hawaii.edu. The authors wish to thank the editor and three anonymous reviewers for their constructive comments and suggestions.

EXECUTIVE SUMMARY

Satisfaction has traditionally been conceptualized as a global affective response toward offering usage/consumption (Westbrook 1987). To date, its study has yet to uncover the complexities related to the antecedents leading to global satisfaction, which are customers' reactions to different foci of offering usage/consumption. However, a number of research streams in a variety of disciplines have investigated these antecedents and suggested that they are usually independent and multidimensional. These investigations have implications for managers that are more complex and often contrary to those associated with the traditional conceptualization of (dis)satisfaction. They also have implications for the underlying models and measurement techniques that may be appropriate for understanding (dis)satisfaction. These streams of research, their prospective implications, and supportive findings from related research are reviewed, and their associated issues and directions for additional research are discussed.

Scholars from disciplines as diverse as human resources, engineering, and marketing have identified different antecedents to (dis)satisfaction. The primary distinction among these antecedents is that (1) some increase satisfaction when present but do not increase dissatisfaction when absent, (2) some increase dissatisfaction when absent but do not increase satisfaction when present, (3) some impact both satisfaction and dissatisfaction and negative evaluations to the extent that they are present or absent, and (4) some have no impact on satisfaction and

dissatisfaction. Each of the research streams has its own distinct terminology for identifying these factors. Because of their marketing origins coupled with their direct connection to (dis)satisfaction, we use the terms satisfiers, dissatisfiers, criticals, and neutrals (Cadotte and Turgeon 1988), respectively, as generic terms to refer to these factors.

A cross disciplinary review of the literature suggests that satisfiers meet the intrinsic needs of individuals, which are considered to be ends in themselves. Dissatisfiers tend to meet the extrinsic needs of individuals and their minimal requirements, which are in turn related to the functional performance of offerings and are means to ends. This suggests that customers can be highly satisfied only if the functional or utilitarian aspects of the offerings are controlled and the psychological or hedonistic aspects are offered in addition.

While they do not specifically deal with (dis)satisfaction, a number of models and theories help illustrate the relative impact of satisfiers, dissatisfiers, criticals, and neutrals on (dis)satisfaction and the evolution cycle among these factors. For example, prospect theory (Kahneman and Tversky 1979) suggests that the impact of losses (negative outcomes) is greater than the impact of gains (positive outcomes). This finding lends support to the idea that dissatisfiers have priority over satisfiers. Further, Levitt's (1986) total product model suggests there is an evolving cycle among these antecedents. For example product attributes that once were satisfiers become criticals and then dissatisfiers over time (Brandt 1988; Cadotte and Turgeon 1988; Kano et al. 1984).

The review of these research streams reveals several unresolved issues. The most important of these is the question of how to integrate the existence of satisfiers, dissatisfiers, criticals, and neutrals into customer satisfaction models. However, most research in customer satisfaction relies on the disconfirmation of expectations (DE) model, which has not accounted for the multi-dimensional nature of these antecedents leading to satisfaction. As such, further extensions to the DE model or an alternative model are needed.

As an extension to the DE model, the need-gratification model (Oliver 1997) captures the curve-linear relationship between the change in product attribute level and (dis)satisfaction. Further, a context-specific satisfaction framework (Giese and Cote 2000) suggests a further extension to the DE model. One theoretical structure that may be able to provide an alternative understanding of customer (dis)satisfaction is social judgment-involvement (SJI) theory (e.g., Sherif, Sherif, and Nebergall 1965), which conceptualizes attitudes in terms of evaluative reference scales composed of three latitudes: the latitude of acceptance, the latitude of rejection, and the latitude of non-commitment. The asymmetric nature of these latitudes is consistent with the nature of satisfiers and dissatisfiers as presented by Kano et al. (1984), Cadotte and Turgeon (1988), and Oliver (1997). Arguably, satisfiers could be conceptualized in terms of associated evaluative reference scales that are dominated by the latitude of acceptance; dissatisfiers might be thought of in terms of evaluative reference scales dominated by the latitude of rejection; and neutrals may be thought of in terms of evaluative reference scales dominated by the latitude of non-commitment (see Vargo and Lusch 2004). Measurement techniques uniquely associated with SJI (e.g., Vargo and Lusch 2004) might also provide a foundation for better measurement of satisfiers and dissatisfiers.

A related, more general issue is how satisfiers and dissatisfiers can be identified and measured. These issues might be tied to an additional issue of what is an appropriate model for a more comprehensive understanding of satisfaction. Generally, a few methodological approaches have been used to examine these antecedents of (dis)satisfaction. The critical incident technique used by Herzberg et al. (1959) and Cadotte and Turgeon (1988) requires respondents to identify the incidents (work-related, service-encounter-related) that have caused them to be exceptionally satisfied and dissatisfied. The incidents can then be classified through a two-by-two matrix of high and low satisfaction and dissatisfaction (or related behaviors such as compliments and complaints). Incidents that can cause only satisfaction are identified as satisfiers; incidents that only cause dissatisfaction are identified as dissatisfiers.

Kano et al. (1984) and other researchers (Berger et al. 1993; Matzler and Hinterhuber 1998) have applied the functional and dysfunctional technique. This technique requires customers to categorize their responses to both the functional (i.e., presence of or high level) and dysfunctional (i.e., absence of or low level) conditions of a product attribute as one of the following: (1) I like it that way, (2) It must-be that way, (3) I am neutral, (4) I can live with it that way, and (5) I dislike it. In a manner similar to critical incident technique, each product attribute is then categorized as an attractive, must-be, one dimensional, indifferent, reverse, or questionable/skeptical quality element.

Oliver (1997) proposes a need gratification technique, in which respondents are asked whether performance on a product attribute met, fell short, or exceeded their needs, providing a need-gratification scale. Each product attribute can then be examined by looking at the relationship between responses on the need-gratification scale and overall satisfaction. He suggests that the relationships should reveal curvilinear patterns for monovalent dissatisfiers and monovalent satisfiers, respectively, with some (bivalent satisfiers/criticals) displaying a monotonically increasing relationship. A “null,” or random, relationship would indicate that need-fulfillment is not related to satisfaction.

The present review also yields valuable managerial implications. The key is to identify these separate constructs so that decision-makers can make strategic marketing decisions to create high levels of customer satisfaction that can be used for competitive advantage. Dissatisfiers must be controlled at all times because they inhibit satisfaction. Several satisfying transactions will be needed to compensate for a single dissatisfying transaction. Once dissatisfiers are managed, factors that act as satisfiers can be provided at relatively high levels, typically above what is expected, to enhance satisfaction. This process can be dynamically updated through a continuous improvement process model that recognizes that satisfiers may become dissatisfiers and new or refined factors emerge as satisfiers over time. The changes occur as a result of advanced technology, competition, and changes in customers' needs and expectations.

Keywords: Dissatisfaction, Dissatisfiers, Satisfaction, Satisfiers.

Satisfiers, Dissatisfiers, Criticals, and Neutrals: A Review of Their Effects on Customer (Dis)Satisfaction

INTRODUCTION

Consumer satisfaction is “a global evaluative judgment about product usage/consumption” (Westbrook 1987, p. 260). Consumer satisfaction is important because of its role in creating competitive advantage (Anderson and Sullivan 1993; Matzler and Hinterhuber 1998; Mittal et al. 2005), and therefore has received significant attention in the marketing literature. Highly satisfied customers will be brand loyal, remain customers longer, provide favorable word-of-mouth advertising, increase purchasing of offerings, and ultimately enhance sales (Aaker 1992; Anderson, Fornell, and Lehmann 1994; Fornell 1992; Oliver 1997). On the other hand, dissatisfied customers are likely to stop purchasing the offerings, to provide unfavorable word-of-mouth advertising, and to complain, return and boycott the product class, the brand, and the seller or retailer (Day et al. 1981; Hirschman 1970).

To date, much of marketing research on consumer satisfaction has employed the *disconfirmation of expectations model* (DE). The DE model assumes that individuals evaluate offering performances by comparing the *perceived performance* with their *expectations* (Cadotte, Woodruff, and Jenkins 1987; Oliver 1997; Parasuraman, Zeithaml and Berry 1985, 1988). When *perceived performance* exceeds *expectations*, it causes positive disconfirmation or *satisfaction*, and when *perceived performance* is below *expectations*, it causes negative disconfirmation or *dissatisfaction*. Although this model has thus far been supported by numerous empirical studies (e.g., Mittal, Kumar and Tsiros 1999; Oliver 1993; Westbrook and Oliver 1991), it has yet to incorporate further complexities that may arise in the process of arriving at global satisfaction.

Based upon a process-oriented model, consumer (dis)satisfaction toward different foci of product usage/consumption can be considered as an antecedent to global (dis)satisfaction. For example, customers’ (dis)satisfaction with an automobile is influenced by their affective reactions to the in-car GPS system, the driving experience, and other factors related to product acquisition and/or consumption. These multiple reactions, as noted by Giese and Cote (2000), tend to be independent from each other. For example, consumer may be satisfied with one aspect of the product (e.g., in-car GPS system), while dissatisfied with another aspect (e.g., driving experience). Therefore, consumers’ reactions to different components of the product may vary in the degree of satisfaction or dissatisfaction, resulting in conflicting feelings of the overall product. In addition, these different components tend to vary in terms of their ability to impact (dis)satisfaction: (1) some increase satisfaction when present but do not increase dissatisfaction when absent, (2) some increase dissatisfaction when absent but do not increase satisfaction when present, (3) some impact both satisfaction and dissatisfaction and negative evaluations to the extent that they are present or absent, and (4) some have no impact on satisfaction and dissatisfaction. While various terms have been used to describe these factors, we use the terms *satisfiers*, *dissatisfiers*, *criticals*, and *neutrals* (Cadotte and Turgeon 1988), reflecting the marketing and consumer satisfaction focus of this review.

The purpose of this paper is to review the literature suggesting different taxonomies of antecedents to (dis)satisfaction across disciplines, to identify the common findings and issues, and to point toward research directions that are needed to synthesize and extend what is known. First, we explore the taxonomy of antecedents to (dis)satisfaction, followed by a discussion on the relative impact of the

antecedents on (dis)satisfaction. We then identify theoretical implications and measurement issues. Finally, we discuss managerial implications and suggest future research avenues.

THE TAXONOMY OF ANTECEDENTS TO (DIS)SATISFACTION

To examine the taxonomy of antecedents to (dis)satisfaction, the present literature review draws on disciplines as diverse as human resources (e.g., Herzberg et al. 1959), engineering (e.g., Kano et al. 1984), and marketing (e.g., satisfaction, service quality, and consumer behavior) (e.g., Cadotte and Turgeon 1988; Maddox 1981; Matzler and Hinterhuber 1998; Oliver 1995, 1997; Swan and Combs 1976; Woodruff, Cadotte, and Jenkins 1983; Zhang and Dran 2000). Table 1 presents a cross-disciplinary comparison of the terms used to represent the antecedents to (dis)satisfaction.

TABLE 1
The Taxonomies of Antecedents to (Dis)Satisfaction

Herzberg et al. (1959) Soliman (1970) Zhang & Dran (2000)	Motivators	Hygienes	---	---
Swan & Combs (1976)	Expressive Factors	Instrumental Factors	---	---
Kano et al. (1984) Matzler & Hinterhuber (1998)	Attractive	Must-Be	One- Dimensional	Indifferent
Oliver (1995)	Monovalent Satisfiers	Monovalent Dissatisfiers	Bivalent Satisfiers	Null Relationships
Cadotte & Turgeon (1988)	Satisfiers	Dissatisfiers	Criticals	Neutrals

Motivators and Hygienes

The earliest study of the taxonomy can be found in the human resources literature of Herzberg et al. (1959). Employing the critical incident technique (c.f., Bitner, Nyquist, and Booms 1985) in the context of job satisfaction, they introduce the *two-factor theory* (also known as the *motivator-hygiene model*), which suggests two sets of factors affect job (dis)satisfaction and performance: *motivators* and *hygienes*.

Motivators are factors that lead to personal satisfaction and sustain motivation for continuous improvements. They consist primarily of job *content* factors like an individual's need for self-actualization, self-realization, growth, achievement, recognition, and advancement in work. Examples include skill variety, task identity, task significance, autonomy, and feedback. Their presence enhances motivation to work harder, but their absence does not cause dissatisfaction.

In contrast, *hygienes* are factors not related to the job itself, but to the conditions that employees have come to expect as "ordinary" that surround the doing of the job (Herzberg et al. 1959, p. 113). Hygienes consist primarily of job *context* factors such as the physiological, safety, and social needs of employees in the workplace. Examples include supervision, interpersonal relations, physical working conditions,

salaries, company policies, administrative practices, benefits, and job security. Their presence is expected, so they have no satisfying consequences when fulfilled and do not provide motivation to work harder, but their absence causes dissatisfaction.

Soliman (1970) extends Herzberg et al.'s (1959) delineation of motivators and hygienes. He identifies motivators as high-order needs, which represent human needs for psychological growth, and hygienes as low-order needs, which reflect the animal side of human nature in avoiding unpleasant environments. The organizational environment determines which need categories dominate and therefore influences (dis)satisfaction depending on the degree to which they are met.

Zhang and Dran (2000) also found support for Herzberg et al.'s (1959) classification in relation to (dis)satisfaction in the marketing literature. In a website context, they define motivators as factors that add value and are closely related to individuals' interaction and involvement, either cognitively or emotionally. Examples include enjoyment, cognitive outcome, and credibility. On the other hand, hygienes are factors that are functional and serviceable such as technical aspects, navigation, privacy, and security. They also implied the presence of criticals, factors that are more complex and can serve as both hygienes and motivators. Examples include organization of information and information content. Similar to Herzberg et al. (1959), Zhang and Dran (2000) argue that fulfillment of hygienes acts as a prerequisite to motivators.

Expressive and Instrumental Factors

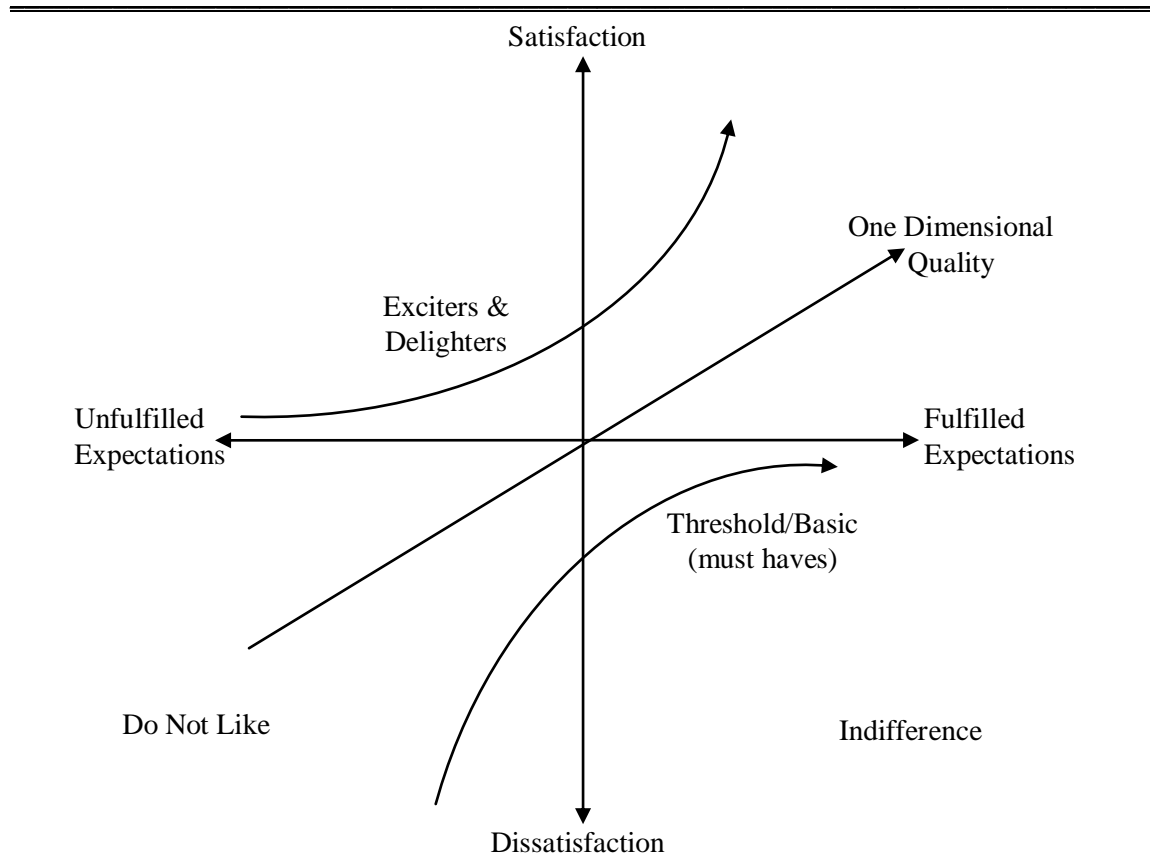
Swan and Combs (1976) reported additional support for Herzberg et al.'s (1959) motivator-hygiene model in their study of the clothing industry. They linked *motivators* and *hygienes* to *expressive* and *instrumental factors* respectively. They defined expressive factors as the psychological aspects of products that are ends in themselves. Examples include styling, responses of other people to the item, comfort, and color. Instrumental factors refer to the physical aspects of products that are means to a set of ends. Examples include durability, laundering properties, warm or cool to wear, retention of shape or color, wrinkle-resistant, construction, and good or poor fit. In addition to these evaluative dimensions, they implied the presence of criticals, attributes that are related to both expressive and instrumental factors.

Maddox (1981) replicated Swan and Combs' (1976) study and found qualified support for expressive and instrumental factors. Maddox reinforced the notion that instrumental factors were prerequisites to expressive factors for producing satisfaction.

Attractive, Must-Be, One Dimensional, and Indifferent Quality Elements

Similarly, in the field of mechanical engineering, Kano et al. (1984) proposed a model that echoes Herzberg et al.'s (1959) motivator-hygiene model and identifies five antecedents to (dis)satisfaction. He calls them attractive, must-be, one dimensional, indifferent, and reverse quality elements. *Attractive quality elements* were identified as factors that increase satisfaction when fulfilled and are acceptable even when not fulfilled (e.g., remote control and feather touch switches). *Must-be elements* are factors taken for granted when fulfilled, but result in dissatisfaction when not fulfilled (e.g., image resolution and provision of a user's manual). *One-dimensional elements* are factors that lead to satisfaction when fulfilled and result in dissatisfaction when not fulfilled (e.g., design and after-sale support). *Indifferent quality elements* are factors that result in neither satisfaction nor dissatisfaction, regardless of being fulfilled or not. *Reverse quality elements* are factors that result in dissatisfaction when fulfilled and in satisfaction when not fulfilled. They mirror one-dimensional elements. Kano et al. (1984) represent these quality elements as illustrated in Figure 1.

FIGURE 1
Kano's Model

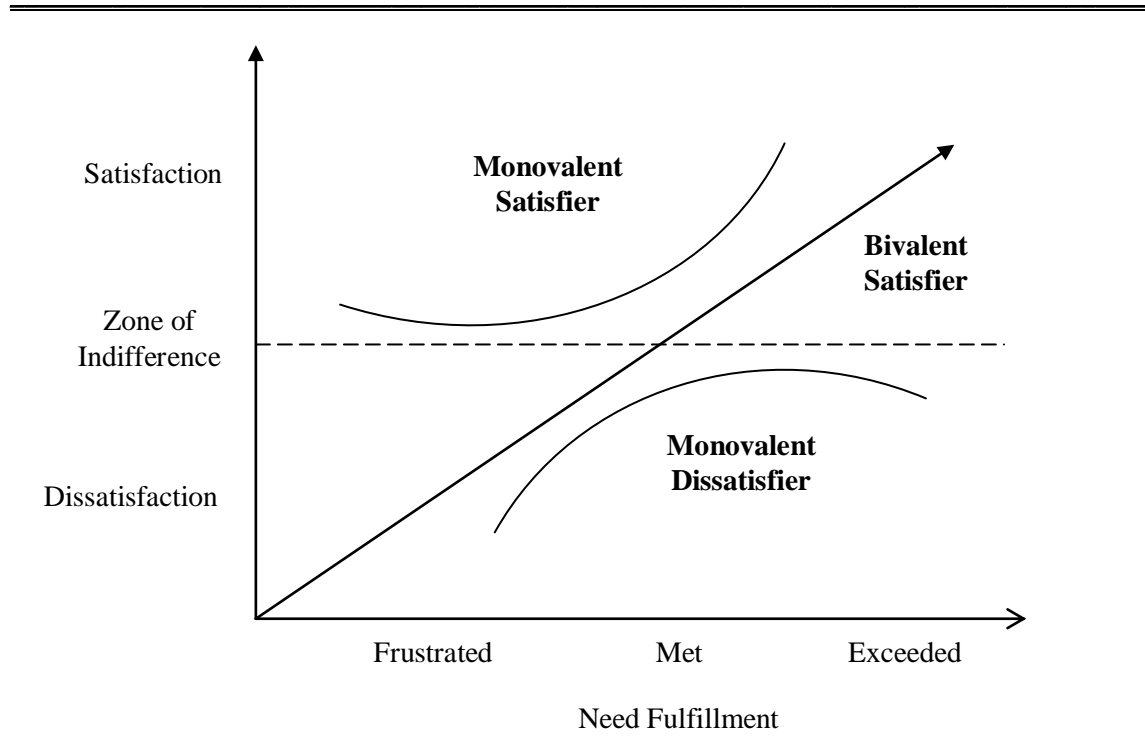


Source: Kano et al. (1984).

Monovalent Dissatisfiers, Monovalent Satisfiers, Bivalent Satisfiers and Null Relationships

To date, the topic on the antecedents to (dis)satisfaction has been given comparatively limited treatment in the marketing literature (for exceptions, please see Giese and Cote 2000; Cadotte and Turgeon 1988; Maddox 1981; Oliver 1997; Silvestro and Johnston 1990). Among these exceptions, Silvestro and Johnston (1990) applied the critical incident technique and found support for the *satisfiers*, *dissatisfiers*, and *criticals* taxonomy proposed by Cadotte and Turgeon (1988), using anecdotal evidence from a variety of service industries. Oliver (1997) agrees with the concepts, but redefines the terms as monovalent dissatisfiers, monovalent satisfiers, and bivalent satisfiers. He depicts the relationship between need fulfillment and satisfaction as shown in Figure 2. This figure shows that: (1) *monovalent dissatisfiers* (“dissatisfiers”) provide the greatest source of dissatisfaction, (2) *monovalent satisfiers* (“satisfiers”) provide the greatest source of satisfaction, and (3) *bivalent satisfiers* (“criticals”) influence both satisfaction and dissatisfaction. As demonstrated by Figure 2, the decrease in the level of monovalent satisfiers does not result in dissatisfaction, while the increase in the level of monovalent dissatisfiers does not lead to satisfaction. The level of bivalent satisfiers, however, affects satisfaction linearly.

FIGURE 2
The Relationship between Need Fulfillment and Satisfaction



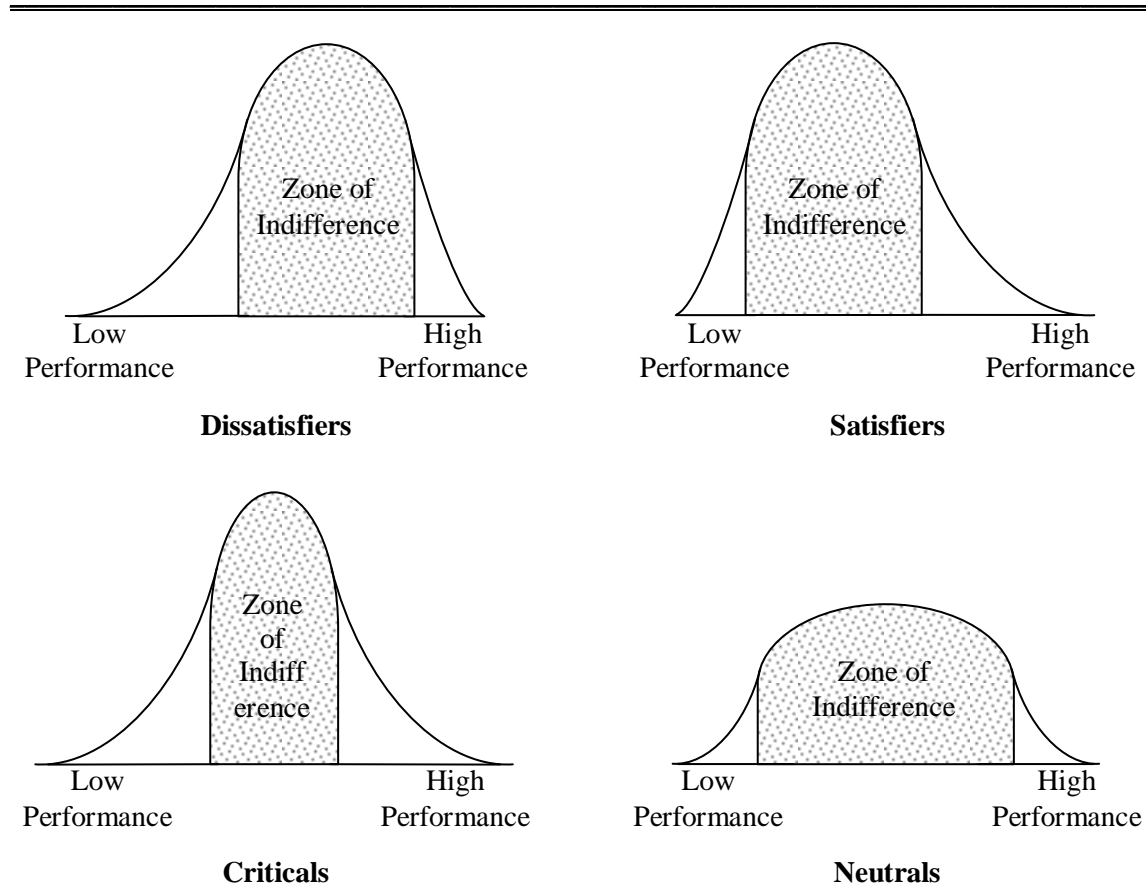
Source: Oliver (1997).

While monovalent satisfiers and dissatisfiers are conceptualized as never contributing to dissatisfaction and satisfaction, respectively, Oliver (1997) does acknowledge the possibility of modest contribution. Consistent with Cadotte and Turgeon (1988; see also Woodruff et al. 1983), he suggests that the line of demarcation between satisfaction and dissatisfaction may not be distinct, but rather may be characterized as a *zone of indifference*.

Satisfiers, Dissatisfiers, Criticals, and Neutrals

Cadotte and Turgeon (1988) represent satisfiers, dissatisfiers, criticals, and neutrals in terms of hypothetical distributions of perceived performance. *Dissatisfiers* are skewed toward negative performance perceptions while *satisfiers* are skewed toward positive perceptions. *Neutrals* and *criticals* have more balanced distributions. The distinctive feature of these distributions is the relative placement and dominance (in relation to positive and negative evaluations) of a zone of indifference (see, e.g., Woodruff et al. 1983), representing neutral evaluations. The zone of indifference is discussed further in later sections. Figure 3 shows the hypothetical distributions of these antecedents to (dis)satisfaction.

FIGURE 3
Performance by Distribution of Satisfiers, Dissatisfiers, Criticals, and Neutrals



Source: Cadotte and Turgeon (1988).

Each of the research streams has its own distinct terminology for identifying these antecedents. Because of their marketing origin coupled with their direct connection to (dis)satisfaction, we use the terms *satisfiers*, *dissatisfiers*, *criticals*, and *neutrals* of Cadotte and Turgeon (1988), respectively, as generic terms to refer to these factors in the present review.

Overall, the shared characteristics of these studies show that the classification of antecedents to (dis)satisfaction as satisfiers, dissatisfiers, criticals and neutrals can be elaborated based on two related classifications or models. The first classification involves instrumental *versus* expressive factors. As noted, Swan and Combs (1976) imply that expressive factors are linked to satisfiers, while instrumental factors are linked to dissatisfiers. Maddox (1981) found support for Swan and Combs' (1976) delineation of *expressive* and *instrumental factors* by replicating their study using clothing, personal care, and durables. However, he also reported that the findings are context-contingent, since they were not supported across the four product categories.

The second classification schema is the total product model (Levitt 1986). Levitt (1986) conceives of a product as comprising several sub-components. The *generic* or *core product* represents the core, often physical component of the product – the “rudimentary substantive ‘thing’ without which there is no

chance to play the game of market participation” (Levitt 1986, p.78). The *expected product* represents the customers’ minimally expected factors of the offering, including the *generic product*, without which consumers would not be likely to find it acceptable. The *augmented product* represents the product factors that offer customers more than they have anticipated, and therefore serves to differentiate the offering or brand from that of the competitors’. These three components of the total product appear to correspond to criticals, dissatisfiers and satisfiers, respectively. With this in mind, we offer a more detailed discussion and summary of the taxonomy of antecedents to (dis)satisfaction.

Satisfiers are factors that elicit satisfaction when present, but their absence does not cause dissatisfaction (Cadotte and Turgeon 1988). Satisfiers are facets of market offerings that meet the intrinsic needs of an individual (Herzberg et al. 1959; Maddox 1981; Soliman 1970; Swan and Combs 1976; Zhang and Dran 2000). Intrinsic needs refer to an individual’s needs that are pursued for his/her own sake (Holbrook 1999) (c.f., the need to pursue an aesthetic experience in an art museum). Examples of satisfiers in the lodging industry include the spaciousness of the lobby, helpful attitudes of employees, and management’s knowledge of service. Examples in the clothing industry include styling, responses of other people to the item, comfort, and color (Maddox 1981). These examples also suggest that satisfiers are facets of consumption, which may be linked to psychological aspects of human needs that are intangible, such as feelings of being acknowledged, accepted, and needed. Reflecting the total product model, satisfiers also reflect the augmented part of the product, or the value enhancing features. Examples in the package delivery industry include offering delivery to all locations, and offering prompt next-day delivery (Brandt 1988).

Dissatisfiers are factors for which low performance (or absence) can cause dissatisfaction, yet, higher levels (or presence) do not increase satisfaction (Cadotte and Turgeon 1988). In contrast to satisfiers, they are facets of market offerings that are intended to satisfy extrinsic human needs (Herzberg et al. 1959; Maddox 1981; Soliman 1970; Swan and Combs 1976; Zhang and Dran 2000). Extrinsic needs are functional and instrumental towards an end (Holbrook 1999). The unavailability of parking spaces near a restaurant can be but one example of dissatisfier. Examples from the clothing industry include durability and laundering properties (Maddox 1981). These examples also suggest that dissatisfiers may be linked to functional aspects of human needs. Further, dissatisfiers tend to represent customers’ minimum requirements, or expectations of the offerings. Examples along this line can be given in the airline industry like flight information accessibility and delivery of the luggage (Oliver 1997). In the package delivery industry, convenience of use can serve as another example of dissatisfier (Brandt 1988).

Criticals are factors that elicit both positive and negative feelings (Cadotte and Turgeon 1988). Criticals are probably the most important factors to control because they create either a positive or negative impact on (dis)satisfaction. Examples might include quality of service and quality of food in a restaurant. Criticals also tend to be the core or generic aspect of a product. Consider again, for example, an air travel experience. Criticals could be whether the trip is comfortable and whether customers receive courteous treatment from the flight attendants (Oliver 1997).

Neutrals are factors that do not elicit positive or negative evaluations regardless of their presence or absence (Cadotte and Turgeon 1988). Examples might be the quality of advertising or variety of service.

RELATIVE IMPACT OF THE ANTECEDENTS ON (DIS)SATISFACTION

The foregoing section illustrates the taxonomy of the antecedents leading to (dis)satisfaction. In this section, the relative impact of these antecedents on (dis)satisfaction is discussed.

Impact Strengths

Dissatisfiers appear to have a greater impact on consumer (dis)satisfaction than satisfiers. Several studies suggest that compensatory satisfying transactions might be needed to compensate for a single dissatisfying transaction (Brandt and Reffett 1989; Czepiel, Rosenberg, and Akerele 1974). For example, in a human resources context, a worker who has a difficult supervisor might tolerate his or her job only if the job is challenging, exciting, and keeping him/her happy (Herzberg et al. 1959). Similarly, Brandt and Reffett (1989) note that compared with satisfactory service, customers are more likely to attend to unsatisfactory service, because satisfactory service is usually the expected outcome of a service delivery. As a result, unsatisfactory service experiences may have a greater impact on overall evaluation outcome than highly satisfactory ones.

Geise and Cote (2000) also reported that dissatisfaction responses were viewed as more extreme than satisfaction (e.g., angry, disappointed, mad, upset, cheated, or aggravated). Further, they found that it was quite common for respondents to refer to the provider and the marketer when they were expressing dissatisfaction, especially related to fairness and accurate information (e.g., felt cheated, gullible, gyped, or resentful).

Further evidence concerning the relative impact of satisfiers versus dissatisfiers on (dis)satisfaction can be found in prospect theory (Kahneman and Tversky 1979). Prospect theory, (Kahneman and Tversky 1979) originated in the economics and rational choice literature but has been applied widely to marketing (Fornell 1992). According to prospect theory, value (utility) can be represented as an asymmetric, S-shaped function relative to perceived gains and losses. This function is generally concave for gains (risk averse) and convex for losses (risk seeking). It implies the following characteristics: 1) reference dependence (i.e., value can be defined as gains and losses relative to the reference point), 2) loss aversion (i.e., the value function is steeper for losses than for gains), and 3) diminishing sensitivity (i.e., the marginal value of both gains and losses decreases with their size).

Prospect theory lends support to the differentiation between dissatisfiers and satisfiers, given the proposition that value can be framed as a function of either losses (dissatisfiers) or gains (satisfiers). The risk aversion characteristic implies that dissatisfiers have a greater impact on consumer (dis)satisfaction than do satisfiers, because losses have a greater impact on value perception than gains. The diminishing sensitivity also yields interesting insights. It indicates that consumers will be very sensitive to marketing efforts made to reduce losses (or to eliminate dissatisfiers) if the product attribute level is lower and close to the reference point. On the other hand, consumers will most likely ignore the increase in gains (or enhanced satisfiers) if the product attribute level is already much higher than the reference point. This is consistent with the context-dependent nature and timing issue of consumer satisfaction (Geise and Cote 2000).

The impact of criticals on consumer (dis)satisfaction, however, appears to be greater than both satisfiers and dissatisfiers, as criticals usually present the generic or core offering (Levitt 1986). For example, even with power window locks (dissatisfiers) and an in-car GPS system (satisfiers), the impact of a poor car engine overshadows other contributors to (dis)satisfaction. Levitt (1986) also emphasizes the central

role of generic product as being that “rudimentary substantive ‘thing’ without which there is no chance to play the game of market participation” (p. 78).

Impact over Time

Several studies have suggested that these factors of evaluation evolve over time. Levitt’s (1986) total product model can also be related to the implication that factors that used to be satisfiers become criticals and then dissatisfiers over time (Brandt 1988; Cadotte and Turgeon 1988; Kano et al. 1984). Levitt suggests that, over time, the factors comprising the *augmented product* will shift to the *expected product* and, in time, might be considered to be generic. For example, tone dialing and last number redial once represented augmented products, but over time have become expected. Currently, most customers will not consider buying phones without these features; they are *dissatisfiers*.

Usually, *Satisfiers* become *criticals* and then *dissatisfiers* as a result of advanced technology, competition, and changes in customers’ needs and expectations. For example, power locks on cars were once satisfiers, which became criticals and later dissatisfiers, as competitors began to make them standard. Similarly, power window locks, air bags, and seatbelts once served as satisfiers but now are considered dissatisfiers by most market segments. Currently, a navigation system is a satisfier, but as more competitors make them available it too is likely to become a dissatisfier.

The cycle of satisfiers, criticals, and dissatisfiers may evolve when a customer’s relationship with the company changes. That is, new customers might consider certain factors as *satisfiers*, while loyal customers may find these expected, and thus these factors becoming *dissatisfiers* (Anderson and Mittal 2000; Matzler and Hinterhuber 1998). For instance, at Ritz Carlton, the receptionist addresses the guests with their name, for example: “Mr. Smith, you are all set for check-in.” The name addressing is considered a satisfier for new guests, but not for regular guests. In fact, the name addressing can act as a dissatisfier if the receptionist forgets to use it with a regular guest.

This implies that a long-term success in marketing depends not only on how successfully customer expectations can be met and exceeded, but also on how well a provider manages those expectations. The changing needs and expectations must be monitored using a customer feedback system (Brandt 1988). However, this process may also pose a challenge for the company, as it entails constant product updates. As an alternative, a company may utilize some more stable satisfiers. For example, through buying a Harley-Davidson bike, an individual will feel being accepted into the Harley-Davidson community, which symbolizes independence and freedom (McAlexander, Schouten, and Koenig 2002). Such satisfiers, linked to the symbolic meanings of products, tend to be comparatively stable and less likely to decay into dissatisfiers over time.

THE IMPLICATIONS OF THE TAXONOMY ON SATISFACTION RESEARCH

Theoretical Implications and Extensions

As noted, the DE model of customer (dis)satisfaction is designed to operationalize global customer (dis)satisfaction. It has yet to reveal the multi-dimensional nature of the antecedents leading to global customer (dis)satisfaction. To be specific, the DE model has not yet accounted for the existence of satisfiers, dissatisfiers, criticals, and neutrals. As such, further extensions to the existing DE model or alternative theoretical perspectives are needed. To date, three approaches have been suggested, namely, the curvilinear (dis)satisfaction model (Oliver 1997), the context-specific (dis)satisfaction framework (Giese and Cote 2000), and the social judgment theory approach (Vargo and Lusch 2004).

Curvilinear (Dis)Satisfaction Model

Oliver (1997) suggests a curvilinear model of (dis)satisfaction grounded upon need gratification. The performance is examined based on whether the attributes met, fell short, or exceeded customers' needs. The relationship between the need gratification and overall satisfaction reveals the existence of satisfiers, dissatisfiers, criticals, and neutrals. He suggests that the relationships should reveal curvilinear patterns for monovalent dissatisfiers and monovalent satisfiers, respectively, with some (bivalent satisfiers/criticals) displaying a monotonically increasing relationship. A "null," or random, relationship would indicate that need-fulfillment is not related to satisfaction.

The null relationship is also suggested by Cadotte and Turgeon (1988), Oliver (1995, 1997), and Woodruff et al. (1983), who indicate that the scale used to translate perceptions of attribute levels into evaluations of (dis)satisfaction may be characterized by an indifference zone, a range in which evaluations are neither positive nor negative. This relationship is illustrated in Figure 3. This approach acknowledges the curvilinear nature of the relationship between the change of product attribute level and the satisfaction or dissatisfaction. As exhibited in Figure 2, the nature of the relationships is determined by the nature of product attributes or antecedents to (dis)satisfaction: satisfiers, dissatisfiers, neutrals or criticals.

Similarly, Spreng, MacKenzie, and Olshavsky (1996) suggest desire/expectation-congruency rather than subjective disconfirmation as an appraisal process leading to satisfaction. In this model, desire/expectation-congruency is operationalized by two components: 1) a consumer's subjective perception of the difference between perceived performance and desire/expectation, and 2) an evaluation of the difference. Spreng et al. argue that this model is a more general form of other models, such as the ideal-point model or value-percept disparity model (Westbrook and Reilly 1983). The ideal-point model proposes that perceived performance that deviates from customers' desires or expectations, either in the positive or the negative direction, results in lower satisfaction than perceived performance that is congruent with customers' desires or expectations. This ideal-point model, therefore, indicates an inverse U-shape relationship between the change in attribute levels and satisfaction evaluation, in which satisfaction evaluation reaches the peak when attribute levels match customers' desires or expectations. Therefore, compared with the subjective disconfirmation model, the desire/expectation-congruency model, as an extension to the ideal-point model, better captures the non-linear relationship between the change in attribute levels and satisfaction evaluations.

Context-Specific (Dis)Satisfaction Framework

Giese and Cote (2000) propose a context-specific (dis)satisfaction framework, which suggests that a researcher needs to define precisely the research context under investigation in order to operationalize the customer (dis)satisfaction construct accurately. In particular, they argue that it is critical for a researcher to determine the satisfaction focus, or the focal aspects of product acquisition and/or consumption, based upon their research question. For example, if satisfaction is limited to specific attributes of the product (e.g., automobile), what are the focal attributes that need to be considered (e.g., safety or customized design)? The instruments to measure satisfaction may vary depending on whether the attributes of interests are satisfiers, dissatisfiers, criticals, or neutrals. If a researcher is primarily interested in examining customer satisfaction with automobile safety (usually a dissatisfier), "relieved" or "skeptical" will be more appropriate measures than "excited" or "pleased." However, if a researcher is trying to survey customer satisfaction with automobile customization service (usually a satisfier), measures like "excited" and "pleased" will then make more sense. In sum, this framework provides a

comprehensive guideline to operationalize customer satisfaction by taking into account the differences among satisfiers, dissatisfiers, criticals, and neutrals.

Social Judgment Theory Approach

Finally, to address this issue, one other theoretical structure that can be applied is social judgment-involvement (SJI) theory (e.g., Sherif et al. 1965). SJI, as a departure from traditional single-point conceptualizations of attitudes, regards attitudes as ranges or evaluative categories which are used by individuals to define what is acceptable and what is not. As a result, SJI conceptualizes attitudes in terms of evaluative reference scales composed of three latitudes: the *latitude of acceptance*, the *latitude of rejection*, and *latitude of non-commitment*. The *latitude of acceptance* consists of the positions concerning the targeted issue that the individual finds most acceptable. The *latitude of rejection* is composed of the positions that the individual finds objectionable. The *latitude of non-commitment* represents all of the positions that the individual finds neither acceptable nor objectionable.

The asymmetric nature of these latitudes is consistent with the nature of satisfiers, dissatisfiers, criticals, and neutrals. Arguably, an individual's evaluation of satisfiers might predominantly fall within the latitude of acceptance. For example, an individual's judgment about an in-car GPS system is more likely to be favorable (the latitude of acceptance), rather than unfavorable (the latitude of rejection) or indifferent (the latitude of non-commitment). Similarly, an individual's evaluation of dissatisfiers may be thought of in terms of evaluative reference scales dominated by; the latitude of rejection and an individual's evaluation of neutrals may be thought of in terms of evaluative reference scales dominated by the latitude of non-commitment (see Vargo and Lusch 2004). These correspondences need to be investigated further. Moreover, measurement techniques uniquely associated with SJI (e.g., Vargo and Lusch 2004) may also provide a foundation for better measurement of satisfiers and dissatisfiers.

These three theoretical approaches appear to be the initial attempts to integrate the differences among satisfiers, dissatisfiers, criticals, and neutrals into the (dis)satisfaction models. Research along this line, however, still remains in its infancy, partly due to the underdeveloped techniques to measure and differentiate satisfiers, dissatisfiers, criticals, and neutrals.

METHODOLOGICAL APPROACHES

Generally, three approaches have been used to measure satisfiers, dissatisfiers, criticals, and neutrals: the *critical incident technique* (Cadotte and Turgeon 1988; Herzberg et al. 1959), the *functional and dysfunctional technique* (Berger et al. 1993; Kano et al. 1984; Matzler and Hinterhuber 1998), and the *need gratification technique* (Oliver 1997). These measurement approaches are summarized below.

Critical Incident Technique

The *critical incident technique* used by Herzberg et al. (1959) and Cadotte and Turgeon (1988), generally requires respondents to identify the incidents (work-related, service-encounter-related) that caused them to be exceptionally satisfied and dissatisfied. The incidents can then be classified through a two-by-two matrix of high and low satisfaction and dissatisfaction (or related behaviors such as compliments and complaints). Incidents that can cause only satisfaction responses are identified as satisfiers; incidents that only cause dissatisfaction are identified as dissatisfiers; etc.

In some ways, the critical incident technique is well-suited to measure the factors of (dis)satisfaction because it allows respondents to identify real satisfying and dissatisfying situations from their own

experience and to express their individual responses, often in their own words. However, this method has several disadvantages. The major weakness is that only the extremes of satisfactory and/or dissatisfactory experiences are considered. That is, data are collected only for those experiences that are notably satisfying or dissatisfying (or caused compliments and complaints) for the respondents. Therefore, with the critical incident technique, many incidents and factors are likely to go unmeasured and unclassified.

Another weakness is that the incidents must take place some time before the collection of the data and the respondents' perceptions may be modified and/or reinterpreted by future events. Additionally, an artificially low response rate is likely because the process is effortful, requiring respondents to take time to describe situations in their own words. Finally, it can be difficult to process and analyze the anecdotal material objectively and reliably.

Functional and Dysfunctional Technique

Kano (e.g., Kano et al. 1984) and other researchers (e.g., Berger et al. 1993; Matzler and Hinterhuber 1998) have used the functional and dysfunctional technique. Generally it requires consumers to categorize the *functional* (i.e., presence of or high level – e.g., “How would you feel if the television picture was good?”) and *dysfunctional* (i.e., absence of or low level – e.g., “How would you feel if the television picture was lousy?”) condition of a product's factors in terms of the following responses: (1) I *like* it that way, (2) It *must-be* that way, (3) I am *neutral*, (4) I can live with it that way, and (5) I *dislike* it. This results in a five-by-five matrix with one dimension representing the responses to the functional condition and the other representing the responses to the dysfunctional condition.

By combining the answers to both functional and dysfunctional questions, each response may be represented by one cell in the matrix. At the same time, each cell in the matrix can be categorized as an *attractive*, *must-be*, *one dimensional*, *indifferent*, *reverse*, or *questionable/skeptical quality element*. For example, if a respondent rates the functional condition of image resolution (i.e., “How do you feel if the television picture was good?”) as “It must be that way,” and the dysfunctional condition of image resolution (i.e., “How do you feel if the television picture was lousy?”) as “I do not like it,” this response is classified as a *must-be element*. Or, if another respondent rates the functional condition of image resolution as “I like it that way,” and the dysfunctional condition of image resolution as “I can live with it that way,” image resolution is an *attractive element*. The procedure repeats for all the responses. Consequently, there will be a frequency count score for each quality element.

The final classification of the product attribute as either an *attractive*, *must-be*, *one dimensional*, *indifferent*, *reverse*, or *questionable/skeptical quality element* is based upon which of the five quality elements has the highest frequency count score. For example, in Kano et al.'s (1984) study, many more respondents categorized TV image resolution as a *must-be element* (499) than as an *attractive* (12), *one dimensional* (277), *indifferent* (22), *reverse* (10), or *questionable/skeptical quality element* (44). Given this, the TV image resolution attribute was categorized as a *must-be element*. The method can be extended by using frequency count scores of five quality elements to calculate a consumer satisfaction (CS) coefficient – the relative degree to which an incident can increase satisfaction versus merely decrease dissatisfaction.

Need Gratification Technique

Further, as noted, the need gratification technique suggested by Oliver (1997) can also be used to identify satisfiers, dissatisfiers, criticals, and neutrals. The respondents are asked whether performance on a product attribute met, fell short, or exceeded the respondent's needs, by providing a need-gratification scale. Factors can then be examined by looking at the relationship between responses on the need-gratification scale and overall satisfaction. As noted previously, Oliver suggests that the relationships should reveal curvilinear patterns for monovalent dissatisfiers and monovalent satisfiers, with some (bivalent satisfiers/criticals) displaying a monotonically increasing relationship. A "null," or random, relationship indicates that need-fulfillment is not related to satisfaction.

Method Evaluation

Generally, these techniques appear to be less than ideal. The critical incident technique is limited to those factors of evaluation associated with extremes and is a nominal measure. Kano et al.'s (1984) functional and dysfunctional technique represents an ordinal scale (at best) transformed into a nominal scale (one-dimensional, attractive, etc. classification) only after dropping factors that do not cleanly fit into the available categories. Therefore, the data collected through these two techniques are not suitable for model testing analysis. So, what is needed is a truly interval-scaled index, which may be used in more powerful statistical analyses. Oliver's (1997) three-need category scale has the potential of producing a quantitative index but has not been fully explored. In sum, to date, limited research has examined the approaches to measuring and differentiating satisfiers, dissatisfiers, criticals, and neutrals. Once appropriate measurement techniques are formed, further integration to the existing satisfaction models will be easier.

MANAGERIAL IMPLICATIONS

A number of generalities emerge from studies reviewed here that could provide interesting managerial insights. The broad, general implication is that not all offerings have equal or necessarily similar potential impact on consumer evaluation. For example, this review has identified existing methods that help managers determine which product/service factors correspond to which factors of (dis)satisfaction. Managers can change, revise, eliminate, maintain, or emphasize product/service factors individually to minimize dissatisfaction and maximize satisfaction while maximally allocating resources for competitive and financial advantage. Several more specific implications have also emerged from this review.

First, the research reviewed here suggests that the elimination of dissatisfiers is a prerequisite to enhancing customer satisfaction through satisfiers. Managers can eliminate, modify, change, or replace factors that act as dissatisfiers to meet customers' expectations of satisfiers by fulfilling minimum levels of acceptability. Factors that only cause complaints do not have to exceed customers' expectations. They have to be met so that they prevent customers from being dissatisfied.

Also, managers can identify dissatisfiers from customer complaints. For example, dissatisfiers are most likely to be antecedents to dissatisfaction, while satisfiers are usually not. As such, the information collected through complaint handling will provide a valuable basis to differentiate satisfiers, dissatisfiers, criticals, and neutrals. And in return, managers will be able to reduce complaint behaviors by enhancing quality control over identified dissatisfiers.

Second, and related, prospect theory (Kahneman and Tversky 1979) suggests that dissatisfiers may have a greater influence on the overall consumer (dis)satisfaction than satisfiers. Along a similar vein, Johnston (1995a) notes that it's more important for managers to identify and remove fail points than it is to add delight factors into the service delivery process, because the impact of dissatisfying transactions on overall evaluation tends to outweigh satisfying ones.

For example, although a banking service provides a number of satisfiers such as attentiveness, commitment, care, friendliness, and cleanliness, the presence of one dissatisfier, such as unreliability, will reduce or curtail patronage regardless of the performance of satisfiers. This reduced patronage in turn diminishes not only the immediate value of the customer, but also the lifetime value. Given the high cost of initial customer acquisition in relation to the cost of customer retention (Czepiel et al. 1974), this lifetime value, or customer equity (Rust, Lemon, and Zeithaml 2004), is of particular concern to managers.

Third, prior studies related to satisfiers and dissatisfiers phenomena imply that managers should focus on their firm's core competences and strengths for sources of *satisfiers*. This satisfier identification and creation process can involve several sub-processes. The first is a process of innovation. For example, for automobile firms with superior engineering and technological skills, satisfiers can be found in innovations such as first to market with anti-lock brakes or GPS navigation systems. Alternatively, firms with superior competences in efficient manufacturing may find satisfiers through offering low-cost automobiles. The second process is through marketing communications. That is, the importance of factors in which an enterprise has superior skills can be reinforced through better communications with employees and potential customers. For example, managers in the banking industry can educate both their employees for purposes of enhancing the level of performance (Johnston 1995b) to improve satisfiers (e.g., attentiveness and friendliness) and their consumers for the purpose of heightening the salience and importance of the dimension. Clearly, innovation and marketing communications can be used in tandem to turn competences into satisfiers for competitive advantage.

Fourth, related marketing research also indicates that factors that used to be satisfiers become criticals and then dissatisfiers over time. This implies that managers must perform continuous improvements in their offerings to maintain their competitive advantage. Managers need to monitor their competitors closely and react immediately when new factors are introduced or matched in the market. Once an attribute penetrates the market and becomes an industry standard, customers are likely to expect it and will feel dissatisfied with its absence. This increase in standard industry practice creates dissatisfiers. Companies that fail to keep up with the changing needs and expectations of consumers will have difficulty achieving and/or maintaining competitive advantage. Given this, continuous development of new satisfiers is critical to companies' long-term success and profitability. Further, it might be easier for companies to develop new satisfiers derived from their core competence area than from other areas. This is because the area of core competence is where companies differentiate from their competitors and have the necessary resources for both incremental and radical innovations.

RESEARCH DIRECTIONS

The fact that satisfiers and dissatisfiers, and/or phenomena that appear to be related in varying degrees, have been studied in such a variety of disciplines and sub-disciplines is probably an indication of their significance in the consumer evaluation process. Yet, despite this importance, there has been relatively

little systematic research directed toward their understanding. Arguably, this situation suggests the existence of fertile ground for important research.

Overall, there is a need for further understanding about what differentiates satisfiers from dissatisfiers. That is, what causes some factors to have influence in one or the other or both (i.e., criticals) directions? One line of inquiry may involve the relationship between evaluation and individual needs and values. For example, Westbrook and Reilly (1983), in discussing value-perception theory, suggest that consumer satisfaction is linked with the appraisal that an offering will achieve one's values. Conversely, consumer dissatisfaction is linked with the appraisal that the object or action will block or deny achievement of one's values or will attain one's disvalues. Similarly, Oliver (1995, 1997) distinguishes between what a consumer gets and what a product has or does and, therefore, bases his conceptualization on the need gratification theory (Oliver 1997) and means-end chain analysis (Gutman 1982), which suggests that satisfaction is linked to more abstract or high-level needs while dissatisfaction might be linked to more concrete and lower order needs (see Wolf 1970). Arguably, this distinction among types of needs may be related to the standards issue in various forms of the disconfirmation model (see Oliver 1997). These relationships among types of needs, values, desires, expectations, and satisfiers and dissatisfiers warrant further exploration.

Perhaps related to these relationships is the evolution cycle among satisfiers, dissatisfiers, neutrals and criticals. One explanation is that satisfiers become dissatisfiers as higher order needs migrate to lower order needs as they become satisfied. Stated somewhat differently, if satisfiers are tied to the meeting of what is valued and desired, they may become dissatisfiers as desires become expected. To date, scholarly studies on these intriguing phenomena appear to be somewhat limited. In particular, no systematic finding concerning the satisfiers and dissatisfiers cycle has been documented. Research using longitudinal designs will be most appropriate for related topics.

A number of researchers have represented satisfaction and dissatisfaction in terms of nonlinear models, ones that assume asymmetric relationships between performance and perceptions and that were typically characterized by latitudes or zones of tolerance and/or indifference. Examples can be found in Cadotte and Turgeon (1988) and Oliver (1997). While the asymmetric and nonlinear nature of these models is more compatible than the disconfirmation model, to date, these nonlinear models are under-researched and only partially developed. As noted, Giese and Cote's (2000) context-specific model provides a methodological solution to this problem. They suggest researchers develop context-specific measures. This suggestion, although promising, has been applied rarely in subsequent empirical research. Further application of this model could offer more insights about how to measure satisfiers, dissatisfiers, criticals, and neutrals.

As noted, SJI theory (e.g., Sherif et al. 1965) may provide an alternative theoretical framework and new perspective on how to evaluate customer satisfaction. Vargo (1997) made the initial attempt to bring SJI theory into the context of the evaluation of service encounters and found that the latitude of acceptance was anchored by both expectations and desires. This finding suggests that SJI may be a useful framework for understanding how satisfiers become dissatisfiers as a function of the salient anchor used in evaluation and the dominance of evaluative latitudes. To date, however, this approach has been understudied in the customer satisfaction arena. As such, it offers fertile research ground for future investigation (see also Vargo and Lusch 2004).

Once appropriate measurement techniques are developed, managers can measure satisfiers and dissatisfiers and use them to make strategic decisions on improving consumer satisfaction. Through this

literature review, the phenomena of satisfiers and dissatisfiers have been identified in a variety of disciplines and sub-disciplines that suggest their significance in the consumer evaluation process.

REFERENCES

- Aaker, David A. 1992. "The Value of Brand Equity." *Journal of Business Strategy* 13 (July/August): 27-32.
- Anderson, Eugene W., Claes Fornell, and Donald R. Lehmann. 1994. "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden." *Journal of Marketing* 58 (July): 53-66.
- Anderson, Eugene W. and Vikas Mittal. 2000. "Strengthening the Satisfaction-Profit Chain." *Journal of Service Research* 3 (2): 107-120.
- Anderson, Eugene W. and Mary W. Sullivan. 1993. "The Antecedents and Consequences of Customer Satisfaction for Firms." *Marketing Science* 12 (2): 125-143.
- Berger, Charles, Robert Blauth, David Boger, Christopher Bolster, Gary Burchill, William DuMouchel, Fred Pouliot, Reinhart Richter, Allan Rubinoff, Diane Shen, Mike Timko, and David Walden. 1993. "Kano's Method for Understanding Customer-Defined Quality." *Center for Quality Management Journal* 4 (Fall): 3-36.
- Bitner, Mary Jo, Jody D. Nyquist, and Bernard H. Booms. 1985. "The Critical Incident Technique for Analyzing the Service Encounter." *Summer Educator's Conference Proceedings* Chicago, American Marketing Association: 48-51.
- Brandt, Randall D. 1988. "How Service Marketers Can Identify Value-Enhancing Service Elements." *Journal of Service Marketing* 2 (Summer):35-41.
- Brandt, Randall D. and Kevin L. Reffett. 1989. "Focusing on Customer Problems to Improve Service Quality." *Journal of Service Marketing* 3 (Fall): 5-15.
- Cadotte, Ernest R., and Norman Turgeon. 1988. "Dissatisfiers and Satisfiers: Suggestions from Consumer Complaints and Compliments." *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior* 1: 74-79.
- Cadotte, Ernest R. Robert B. Woodruff, and Roger L. Jenkins. 1987. "Expectations and Norms in Models of Consumer Satisfaction." *Journal of Marketing Research* 24 (August): 305-314.
- Czepiel, John A., Larry J. Rosenberg, and Adebayo Akerele. 1974. "Perspectives on Consumer Satisfaction," in *AMA Educators' Proceedings* Chicago: American Marketing Association, 119-123.
- Day, Ralph L., Klaus Grabicke, Thomas Schaetzle, and Friz Staubach. 1981. "The Hidden Agenda of Consumer Complaining." *Journal of Retailing* 57 (Fall): 86-106.
- Fornell, Claes. 1992. "A National Customer Satisfaction Barometer: The Swedish Experience." *Journal of Marketing Research* 56 (January): 6-21.

- Giese, Joan L. and Joseph A. Cote. 2000. "Defining Consumer Satisfaction." *Academy of Marketing Science Review* <http://www.amsreview.org/amsrev/theory/giese00-01.html>.
- Gutman, Jonathan. 1982. "A Means-End Chain Model Based on Consumer Categorization Processes." *Journal of Marketing* 48 (Spring): 60-72.
- Herzberg, Fredrick, Bernard Mausner, and Barbara B. Snyderman. 1959. *The Motivation to Work, Second Edition* New York: Wiley.
- Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Holbrook, Morris B. 1999. "Introduction to Consumer Value." In *Consumer Value: A Framework for Analysis and Research*, ed. Morris B. Holbrook, New York, NY: Routledge: 1-28.
- Johnston, Robert. 1995a. "The Zone of Tolerance: Exploring the Relationship between Service Transactions and Satisfaction with the Overall Service." *International Journal of Service Industry Management* 6(2): 46-61.
- Johnston, Robert. 1995b. "The Determinants of Service Quality: Satisfiers and Dissatisfiers." *International Journal of Service Industry Management* 6 (5): 53-71.
- Kahneman, David and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47: 263-291.
- Kano, Noriaki, Nobuhiku Seraku, Fumio Takahashi, and Shinichi Tsuji. 1984. "Attractive Quality and Must-Be Quality." Presented at the 12th Annual Meeting of the Japan Society of Quality Control.
- Levitt, Theodore. 1986. *The Marketing Imagination* Expanded Edition. New York: Free Press: 74-93.
- Maddox, Neil R. 1981. "Two Factor Theory and Consumer Satisfaction: Replication and Extension." *Journal of Consumer Research* 8 (June): 97-102.
- Matzler, Kurt and Hans H. Hinterhuber. 1998. "How to Make Product Development Projects More Successful by Integrating Kano's Model of Customer Satisfaction into Quality Function Deployment." *Technovation* 18 (1): 25-38.
- McAlexander, James H., John W. Schouten, and Harold F. Koenig. 2002. "Building Brand Community." *Journal of Marketing* 66 (1): 38-54.
- Mittal, Vikas, Pankaj Kumar, and Michael Tsiros. 1999. "Attribute-Level Performance, Satisfaction, and Behavioral Intentions over Time: A Consumption-System Approach." *Journal of Marketing* 63 (2): 88-101.
- Mittal, Vikas, Akin Sayrak, Pandu Takikamalla, and Eugene W. Anderson. 2005. "Dual Emphasis and the Long-Term Financial Impact of Customer Satisfaction." *Marketing Science* 24 (Fall): 544-555..

- Oliver, Richard L. 1993. "Cognitive, Affective, and Attribute Bases of the Satisfaction," *Journal of Consumer Research* 20(3): 418-430.
- Oliver, Richard L. 1995. "Attribute Need Fulfillment in Product Usage Satisfaction." *Psychology and Marketing* 12 (January): 1-17.
- Oliver, Richard L. 1997. *Satisfaction: A Behavioral Perspective of the Consumer*. New York: McGraw-Hill.
- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry. 1985. "A Conceptual Model of Service Quality and Its Implications for Future Research." *Journal of Marketing* 49 (Fall): 41-50.
- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry. 1988. "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality." *Journal of Retailing* 64 (Spring): 12-40.
- Rust, Roland T., Katherine N. Lemon, and Valarie A. Zeithaml. 2004. "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing* 68 (January): 109-127.
- Sherif, Carolyn W., Muzafer Sherif, and Roger E. Nebergall. 1965. *Attitude and Attitude Change: The Social Judgment-Involvement Approach*. Philadelphia: W. B. Saunders.
- Silvestro, Rhian M. and Robert Johnston. 1990. "The Determinants of Service Quality: Hygiene and Enhancing Factors." In *Quality in Services II: Selected Papers*. Coventry, UK: Warwick Business School: 193-210.
- Soliman, Hanafi M. 1970. "Motivation-Hygiene Theory of Job Attitudes: An Empirical Investigation and an Attempt to Reconcile Both the One- and Two-Factor Theories of Job Attitudes." *Journal of Applied Psychology* 54 (5): 452-461.
- Spreng, Richard A., Scott B. MacKenzie, and Richard W. Olshavsky. 1996. "A Reexamination of the Determinants of Consumer Satisfaction." *Journal of Marketing* 60 (July): 15-32.
- Swan, John E. and Linda Jones Combs. 1976. "Product Performance and Consumer Satisfaction: A New Concept." *Journal of Marketing* 40 (April): 25-33.
- Vargo, Stephen L. 1997. "An Investigation of Latitude Models of Service-Encounter Evaluation." Ph.D. Dissertation, Norman, OK: University of Oklahoma.
- Vargo, Stephen L. and Robert F. Lusch. 2004. "Consumers' Evaluative Reference Scales and Social Judgment Theory: A Review and Exploratory Study." *Review of Marketing Research* 1, 245-284.
- Westbrook, Robert A. 1987. "Product/Consumption-Based Affective Responses and Postpurchase Processes." *Journal of Marketing Research* 24 (August): 258-270.
- Westbrook, Robert A. and Richard L. Oliver. 1991. "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction." *Journal of Consumer Research* 24: 84-91.

- Westbrook, Robert A. and Michael D. Reilly. 1983. "Value Percept Disparity: An Alternative to the Disconfirmation of Expectations Theory of Consumer Satisfaction." *Advances in Consumer Research* 10, 256-262.
- Wolf, Martin G. 1970. "Need Gratification Theory: A Theoretical Reformulation of Job Satisfaction/Dissatisfaction and Job Motivation." *Journal of Applied Psychology* 54 (February): 87-94.
- Woodruff, Robert B., Ernest R. Cadotte, and Roger L. Jenkins. 1983. "Modeling Consumer Satisfaction Processes Using Experience-Based Norms." *Journal of Marketing Research* 20 (August): 296-304.
- Zhang, Ping and Gisela M. von Dran. 2000. "Satisfiers and Dissatisfiers: A Two-Factor Model for Website Design and Evaluation." *Journal of the American Society for Information Science* 51 (December): 1253-1268.