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When Consumers Complain: A Path Analysis of the Key Antecedents of Consumer Complaint Response Estimates

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When do consumers complain? This study probes this question by developing a conceptual framework that includes multiple theoretical perspectives, empirically testing a portion of the proposed model, and using dissatisfaction/complaint data from three different service industries. The hypothesized model uses multidimensional consumer complaint response estimates including voice, private, and third-party responses as dependent variables. Results support several proposed relationships, provide a high level of explained variance, and indicate a moderating role for dissatisfaction intensity. The complaint response estimates are characterized by disparate influence pathways, and expectancy value judgments emerge as critical determinants with positive and negative crossover effects. Attitude toward complaining is more dominant under low dissatisfaction intensity than it is under the high dissatisfaction condition. Important differences emerge across service categories. Implications of this work for managers and researchers in understanding when consumers complain are enumerated.

Ever since Best and Andreasen (1977) published their seminal work about 30 years ago (also see Best 1981), the significance of understanding when consumer dissatisfac-

tion produces complaints (e.g., under what conditions, via what processes) has continued to grow for researchers and practitioners alike. Fornell and Wernerfelt (1987) observe that "data available indicate that customer loyalty can be increased by encouraging consumers to complain" (p. 344). Likewise, the emerging view in relationship marketing and service quality literature emphasizes "recovery"; that is, dissatisfied consumers may (*should*) be converted into satisfied customers (hence recovered) through exemplary responsiveness of service providers. In turn, this recovery rests on managers' understanding of when consumers complain, given that recovery can*not* occur without a complaint. Not surprisingly, a recent survey by DDB Needham/Harris reported that both corporate executives and consumers rated handling of complaints as one of the top five factors that had a major influence on consumers ("Consumers Eager to Know" 1995).

Despite this growing significance, our current understanding of when consumers complain is quite limited, a situation that has changed little since Andreasen (1988) noted "a declining interest in the topic despite the existence of major unanswered questions of interest to business people, public policy makers and consumer interest specialists" (p. 675). This knowledge gap between consumer dissatisfaction and subsequent consumer complaint responses (CCRs) motivated the present research. Three aspects of our study set it apart from past research. First, we propose a framework that includes multiple theoretical approaches and builds on previous attempts by Day (1984), Singh and Wilkes (1991), and Blodgett and Granbois (1992), among others. The inclusion of multiple antecedents allows isolation of their differential effects.

FIGURE 1
Hypothesized Model of Complaint Response Estimates and Its Key Antecedents and Estimated Path Coefficients Across the Three Service Categories
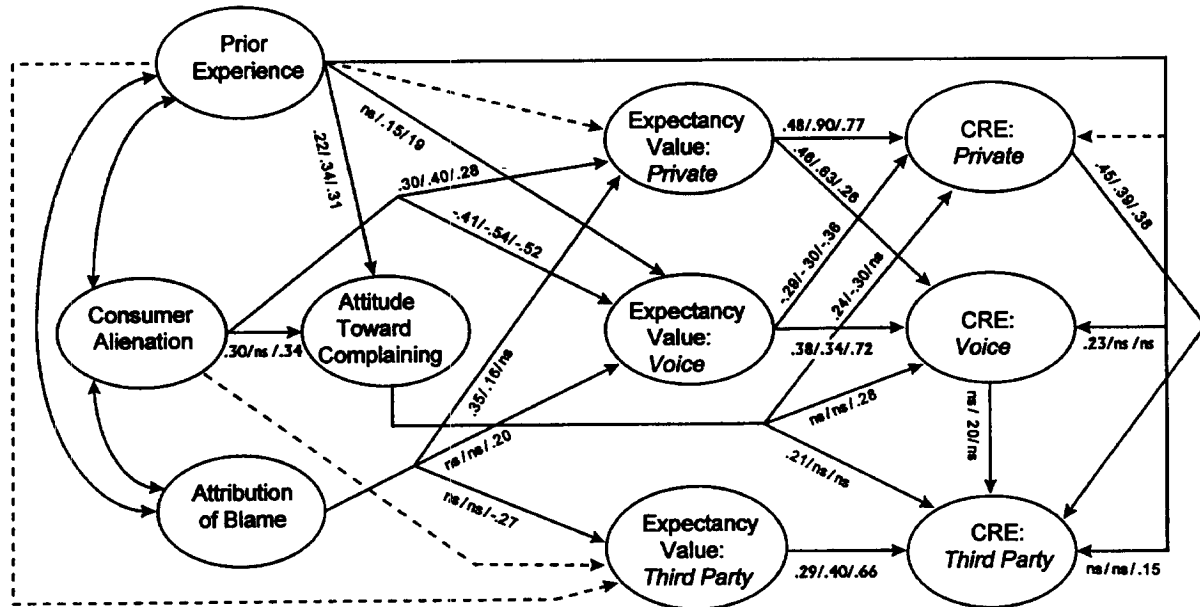
NOTE: Coefficients given for each path are for automotive repair, medical care, and banking, respectively. Dashed lines indicate relationships hypothesized but not significant in any of the service categories.

Second, we empirically test a portion of the proposed CCR model. This serves as a point of departure from much previous work because, although several comprehensive models have been proposed, *none* has been subjected to empirical examination. Third, using data from three different service categories, we obtain evidence on the validity of the proposed model. We begin with our theoretical framework.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

The proposed conceptual model is displayed in Figure 1, and the key hypotheses are summarized in Table 1. The large number of CCR determinants renders the inclusion of all, or even most, potential antecedents within a single empirical study difficult at best. We selected a partial model based on two criteria. First, we preferred antecedents that were rooted in relatively strong theoretical frameworks. For instance, the inclusion of expectancy value (EV) constructs was desirable due to their roots in political and economic frameworks (e.g., Hirschman 1970). Second, we favored antecedents that had been used individually in past research but whose relative or differential impact was largely unknown. For instance, attitude toward complaining and attribution of blame have been

tested individually, but few studies have used both constructs within a single study to unravel their relative effects. Finally, because of the cross-sectional nature of our study and the potential for recall bias, we used complaint response estimates (to be discussed) as the dependent variables. Admittedly, our choice of determinants involves subjective judgments; however, readers will note that this model advances past research in that it is more inclusive and theoretically grounded.

Outcomes: Consumer Complaint Responses

The outcomes of the process model, CCRs, have three main characteristics. First, the CCRs are goal directed (cf. Bagozzi and Warshaw 1990). That is, consumers often do not engage in CCRs as ends in and of themselves. Instead, responses (e.g., complain to retailer) often are exercised to achieve some desirable goals (e.g., redress) although the occurrence of the consequence is uncertain. In other words, CCRs are "intermediate behaviors" that increase the probability of achieving goals but do not guarantee success in that goal attainment is "problematic" due to factors such as lack of control (e.g., a retailer is involved), resource scarcity (e.g., lack of time to complete complaint procedures), and environmental contingencies. Second, CCR does *not* imply that consumers engage in a single, specific

TABLE 1
Summary of Hypotheses Posited, Supporting Literature, and Obtained Findings

Hypothesis	Posited Relationship	Supporting Theory	Past Research	Present Findings
H_1	Voice CRE positively influences third-party CRE	Hierarchical ordering of CREs.	Feick (1987) Blodgett and Granbois (1992) No direct empirical support.	Supported under low dissatisfaction condition for medical care and banking services categories
H_2	Private CRE positively influences third-party CRE	Hierarchical ordering of CREs	Feick (1987) Blodgett and Granbois (1992). No direct empirical support	Supported for each service category Effects consistently larger and significant under high dissatisfaction intensity except for medical care. Significant effects obtained for low dissatisfaction irrespective of service category
H_{3a-c}	Attitude toward complaining positively influences voice, private, and third-party CREs	Learning theory Attitude theory.	Bearden and Mason (1984) Supported for complaint behaviors, not specified dimensions	For voice CRE, supported for banking services and automotive repair for low dissatisfaction intensity For private CRE, consistently supported under high dissatisfaction regardless of service category. In medical care, the direction is opposite to that hypothesized No support for third-party CRE.
H_{4a-c}	EV judgments positively influence voice, private, and third-party CREs	Information processing Economic perspective (dissatisfaction in loose monopolies)	Hirschman (1970) Andreasen (1985) Singh (1990) Supported	For voice CRE, consistently supported regardless of dissatisfaction level and service category Similar results for private and third-party CRE For third-party CRE, effects stronger for high dissatisfaction level
H_{5a-b}	EV-voice negatively influences private CRE, and EV-private is negatively associated with voice-CRE	Crossover effects	Richins (1987) Singh (1990) Limited support	For voice CRE, crossover effects supported for all service categories, especially under high dissatisfaction level. For private CRE, the effects are significant for low dissatisfaction level only regardless of service category
H_{6a-c}	Seller attributions for dissatisfaction are positively associated with voice, private, and third-party EVs.	Attribution theory	Folkes (1984) Folkes and Kotsos (1986) Supported.	Supported for EV-voice in banking services and EV-private for automotive repair and medical care Also supported for EV-third in banking services but in the opposite direction.
H_{7a-d}	Alienation toward the marketplace is negatively associated with voice, private, and third-party EVs and attitude toward complaining.	Generalized affect	Allison (1978) Bearden and Mason (1984) Limited support for attitudes toward complaining	For EV-voice and EV-private, supported regardless of service category. No support for EV-third. Supported for attitudes in automotive repair and banking services
H_{8a-d}	Prior experience of complaining is positively associated with voice, private, and third-party EVs and attitude toward complaining	Learning theory. Behavioral approaches	Bagozzi and Warshaw (1990) No direct empirical support	Consistently supported for attitudes regardless of service category Some support for EV-voice in medical care and banking services No support for EV-private and EV-third
H_{9a-c}	Prior experience of complaining positively influences voice, private, and third-party CREs.	Theory of trying	Bagozzi and Warshaw (1990) No direct empirical support	For voice CRE, supported for automotive repair regardless of dissatisfaction level Also supported for third-party CRE under high dissatisfaction for automotive repair and banking services.
H_{10a-b}	Dissatisfaction intensity moderates the relationship between attitude toward complaining and voice, private, and third-party CREs and between EVs and the preceding CREs.	Motivational factors Self-regulation	Bagozzi (1992) No direct empirical support	Strongly supported for each relationship.

NOTE: CRE = complaint response estimate, EV = expectancy value.

behavior (e.g., complain/not complain). Instead, several diverse options are available including complaining to the retailer, talking to friends and relatives, and writing to the Better Business Bureau (Day, Gabricke, Schaetzle, and Staubach 1981). Third, most consumers engage in multiple complaint responses such as complaining to the retailer *and* talking to friends and relatives about the bad experi-

ence (Day 1984; Richins 1983). This multiplicity is a unique aspect of the CCRs.

Perhaps due to this diversity and multiplicity, CCR has been operationalized using disparate and ad hoc approaches in most previous work. For instance, LaBarbera and Mazursky (1983) focused on exit responses, Folkes (1984) examined complaining to the seller, and Richins

(1983) studied negative word-of-mouth and redress actions. Although some researchers have begun to examine multiple CCRs (e.g., Bearden and Teel 1983), they often have tended to "sum up" or aggregate the diverse responses to arrive at composite measures of complaint reports. Such approaches are troublesome because they ignore key differences in the etiology of different complaint responses. The evidence for differential etiology easily surfaces in the studies that analyze disaggregated CCR. For instance, Richins (1987) notes that "complaint behavior, [negative] word of mouth and [exit] are separate processes influenced by different variables or in different ways by the same variables" (p. 29).

Complaint Response Estimates

Complaint response estimate (CRE) is the likelihood that a particular CCR would be chosen by the dissatisfied consumer. Consistent with Bagozzi and Warshaw (1990), this conceptualization recognizes that CCRs are intermediate goal-directed behaviors that may be problematic because performance impediments exist that are likely to counteract, but not necessarily thwart, one's effort to perform a complaint response. This contrasts with the nonproblematic behaviors addressed by the theory of reasoned action, that is, those actions that an individual believes he or she can or will perform with certainty. Sheppard, Hartwick, and Warshaw (1988) note that researchers using the Fishbein and Ajzen (1975) model have interchangeably used individuals' *intentions* and their *subjective estimates* without considering the nature of the focal behavior. Specifically, intentions indicate the degree to which a person has conscious plans to perform or not perform some future nonproblematic behavior (e.g., "Do you intend to purchase a car?"), whereas subjective estimates are the individual's estimation that he or she will actually perform some goal-directed, and possibly problematic, future behavior (e.g., "Are you likely to voice your complaint?"). Given this distinction, we conceptualize CREs as subjective estimates of complaint responses.

Recently, Singh (1988) proposed a taxonomy in which each dimension represents CREs that are perceived similarly by consumers. Across dimensions, however, CREs are perceived as distinct. By classifying the diverse CREs into fewer dimensions, this taxonomy achieves parsimony, is less likely to obfuscate the underlying differences in CREs, and provides a useful approach to cope with the diversity and multiplicity of CCRs. Singh's taxonomy specifies three dimensions: (1) *voice* CRE, reflecting actions directed toward the seller; (2) *private* CRE, involving negative word-of-mouth communication to friends and relatives and exit behaviors (switch brand/seller); and (3) *third party* CRE, relating to actions directed toward external agencies such as the Better Business Bureau and legal options. Because of the empirical evidence of its convergent, discriminant, and external validity (Prakash 1991; Slama and Williams 1991), this taxonomy is used to conceptualize the dependent variables (see Figure 1).

Interrelationship Among CREs

Researchers recently have examined the interrelationships among the different CREs. For instance, Feick (1987) notes that third-party responses are at a higher hierarchical level than are voice and private responses. As such, Feick likens third-party responses to "hard" actions, whereas voice and private responses indicate "easy" choices. This implies that the probability of third-party responses increases if the individual has made a decision to engage in private and voice responses. Likewise, Blodgett and Granbois (1992) note that many third-party agencies (e.g., Better Business Bureau) *require* that an individual first voice his or her complaint to the seller before filing a complaint with them. Thus we posit that voice and private CREs are direct antecedents of third-party CREs. No crossover effects are posited. We hypothesize the following:

H1: The higher the CRE for voice responses, the greater the third-party CRE.
H2: The greater the private CRE, the higher the CRE for third-party responses.

Attitude Toward Complaining

The attitude construct is conceptualized as the overall affect of "goodness" or "badness" of complaining to sellers and is not specific to a given episode of dissatisfaction. Researchers reason that consumers' dispositions to complain are correlated with certain personality orientations including assertiveness, alienation, self-confidence, locus of control, and self-monitoring (Allison 1978; Bearden and Mason 1984). In addition, learning theories suggest that, as they learn about mechanisms and options of complaining (e.g., knowledge of unfair practices, consumer rights, and complaint channels) and assuming that these experiences yield positive outcomes, consumers develop more positive attitudes toward complaining. This attitude, in turn, relates to complaint responses via attitude theory. Studies with the attitudes construct report explanatory power between 10 and 20 percent (Bearden and Mason 1984). Thus we posit the following:

H3a: The more positive the attitude toward complaining, the higher the voice CRE.
H3b: The more positive the attitude toward complaining, the higher the private CRE.
H3c: The more positive the attitude toward complaining, the higher the third-party CRE.

Expectancy Value Judgments

Because the CCRs (e.g., voice) are instrumental in realizing some desirable consequences (e.g., refund), two related concepts are introduced: an individual's subjective prior probability of the instrumentality for each CCR (i.e., expectancy) and his or her evaluation of the costs and

benefits associated with consequences of each CCR (i.e., value). Although we do not preclude other information processing rules, we propose a multiplicative rule for combining expectancy and value referred to as *expectancy value* (EV) judgment. Consistent with the taxonomy of CCRs, we hypothesize three distinct EV judgments: (1) EV-voice (EV judgments of consequences of voice responses), (2) EV-private (EV judgments of consequences of private responses), and (3) EV-third (EV judgments of consequences of third-party responses). This multidimensional conceptualization is consistent with recent developments in modeling choice behavior (Dabholkar 1994).

The relationship between EV judgments and CREs is conceptualized from two perspectives. First, this link is supported by cognitive arguments rooted in information processing. If an individual evaluates voice as highly instrumental in achieving some desired consequence (expectancy), and if this consequence is highly desirable (value), then cognitive consistency demands a high likelihood of engaging in voice actions (Dabholkar 1994). Second, this hypothesis draws from the work of Hirschman (1970) concerning dissatisfaction in loose monopolies. Hirschman reasoned that different industries reflect different amounts of loose monopoly characteristics. These differences in turn influence the extent to which individual consumers use the voice and exit options. More important, Hirschman recognized that industry characteristics are distal determinants of individual responses, and he identified consumers' perceptions of the "worthwhileness" of a complaint response—say, voice—and the "probability of successful" voice as proximal precursors that capture industry variations (Andreasen 1985; Blodgett and Granbois 1992; Fornell and Didow 1980; Singh 1991). These proximal constructs parallel EV judgments and have been somewhat successful in explaining CCR with variance explained of the order of 10 to 30 percent (cf. Singh 1990). Consequently, we posit the following:

H4a: The more positive the EV judgments for voice, the higher the voice CRE.
H4b: The more positive the EV judgments for private, the higher the private CRE.
H4c: The more positive the EV judgments for third party, the higher the third-party CRE.

Second, following Singh (1990) and Richins (1987), crossover effects are hypothesized between voice and private responses. That is, EV-voice is thought to influence private CRE and EV-private is posited to affect voice CRE. Specifically, the greater the EV of complaining to sellers (i.e., EV-voice), the less likely an individual will engage in private responses. In explaining such crossover effects, Singh (1990) observed, "Exit and W-O-M [private word-of-mouth] responses are less common when the sellers are perceived as responsive to consumer complaints" (p. 13). Likewise, EV-private is posited to affect voice CRE negatively. When private responses are thought to be more instrumental and result in more desirable consequences, the likelihood of voice actions tends to decline. However,

such crossover effects are not hypothesized for third-party CRE:

H5a: The more positive the EV judgments for voice, the lower the private CRE.
H5b: The more positive the EV judgments for private, the lower the voice CRE.

Attribution of Blame

Evidently, the more the consumers blame the seller (external-*locus*), believe that the dissatisfying event is likely to happen again (permanent-*stability*), and perceive that the dissatisfaction could have been avoided (preventable-*controllability*), the stronger the inclination to engage in CCR (Folkes 1984; Krishnan and Valle 1979). The few empirical studies that have examined this construct have explored the direct relationship between attributions and CCR. However, we posit that attribution does *not* directly affect CREs; rather, its effect on CREs is mediated by EV judgments. This hypothesis is based on Folkes (1984), among others, who suggests that a consumer's probability of a consequence (e.g., obtaining a refund) is affected by whether self or seller is blamed for the dissatisfaction. That is, the attributions to external agents are likely to result in higher expectancies of seller responsiveness. These EV judgments in turn influence CREs. The inclusion of EV judgments and attribution of blame within a single model allows testing for mediating effects. However, only the *locus* dimension of attribution of blame could be included in the empirical model. Thus we posit the following:

H6a: The more an individual blames the seller for the dissatisfaction, the more positive his or her EV judgments for voice.
H6b: The more an individual blames the seller for the dissatisfaction, the more positive his or her EV judgments for private.
H6c: The more an individual blames the seller for the dissatisfaction, the more positive his or her EV judgments for third party.

Generalized Affect Toward Marketplace

Generalized affect represents an individual's global feelings about the marketplace, behavior of firms/business, and consumption of products/services. Following Day (1984), consumer discontent (Lundstrom and Lamont 1976) and alienation (Allison 1978) are two potential operationalizations of generalized affect. Specifically, discontent and alienation reflect an individual's orientation drawn from his or her personality (e.g., locus of control), prior experiences (e.g., satisfying/dissatisfying), and demographics (e.g., income). We use consumer alienation in our empirical model. Apparently, a consumer's degree of alienation would influence what he or she expects of the seller in exchange interactions. For instance, a consumer who feels relatively alienated from the marketplace is

likely to evidence feelings of helplessness and powerlessness (Allison 1978) such that he or she is likely to have less positive attitudes toward complaining to sellers and lower EV judgments. For this reason, we hypothesize the following:

H7a: The more alienated the consumer, the less positive his or her EV judgments for voice.

H7b: The more alienated the consumer, the less positive his or her EV judgments for private.

H7c: The more alienated the consumer, the less positive his or her EV judgments for third party.

H7d: The more alienated the consumer, the less positive his or her attitude toward complaining.

Prior Experience

Prior experience is posited to directly influence EV judgments and attitudes. The extent (frequent/infrequent) of past complaining experiences becomes assimilated into an individual's attitude toward complaining. Such processes are consistent with the behaviorist and/or situationist theories that explain how past behaviors and exposure to situations shape and reinforce an individual's behavioral dispositions in future situations. Moreover, prior experiences affect an individual's cognitions about, for instance, how a retailer or manufacturer probably would respond to voiced complaints and the associated costs and/or benefits. Similar effects are hypothesized for private and third-party responses. In their theory of trying, Bagozzi and Warshaw (1990) provide support for this relationship between prior experiences and EV judgments. Consequently, we posit the following:

H8a: The greater the prior experience of complaining, the more positive the EV judgments for voice.

H8b: The greater the prior experience of complaining, the more positive the EV judgments for private.

H8c: The greater the prior experience of complaining, the more positive the EV judgments for third party.

H8d: The greater the prior experience of complaining, the more positive the attitude toward complaining.

Prior experience is also posited to have direct effects on CREs. Bagozzi and Warshaw (1990) note that most common behaviors (including CCRs) fall somewhere along a mindless/mindful continuum where the "mindless" end point reflects behaviors that are driven by prestored scripts without any cognitive activity while the "mindful" end point characterizes behaviors as self-generated reasoned acts that are determined solely by cognitive evaluations (cf. Fishbein and Ajzen 1975). As such, CREs are jointly determined by EV judgments (cognitive) and prior experiences (prestored behavioral scripts), with these compo-

nents mixing in different proportions for different consumers and situations. Thus we posit the following:

H9a: The greater the prior experience of complaining, the higher the voice CRE.

H9b: The greater the prior experience of complaining, the higher the private CRE.

H9c: The greater the prior experience of complaining, the higher the third-party CRE.

Moderating Effects of Dissatisfaction Intensity

We hypothesize that the perceived intensity of dissatisfaction moderates the relationship between key determinants (attitude and EV judgments) and CREs. Although most models proposed to date ignore the role of dissatisfaction intensity, the moderating hypothesis is tenable for two reasons. First, in his essay on self-regulatory mechanisms, Bagozzi (1992) notes that a motivational link is missing in the attitude-intention relationship given that a "favorable attitude [or positive EV judgment] is not sufficient for stimulating intention" (p. 184). Bagozzi identifies motivational forces such as desires, effort, and emotion that represent this missing link. In this regard, note that dissatisfaction intensity is an emotional evaluation that has motivational force. Consumers who feel highly dissatisfied with a consumption experience are more likely to translate their attitudes and EV judgments into CREs than are those who feel less dissatisfied. Second, Prakash (1991) posits that consumers who perceive higher intensity of dissatisfaction are more likely to expend greater effort in complaining resulting in stronger relationships between attitudes and/or EV judgments and CREs. Thus we hypothesize the following:

H10a: The greater the dissatisfaction intensity, the stronger the relationship between attitudes toward complaining and voice, private, and third-party CREs.

H10b: The greater the dissatisfaction intensity, the stronger the hypothesized relationship between EV judgments and voice, private, and third-party CREs.

TESTING THE HYPOTHESIZED MODEL ACROSS THREE SERVICE CATEGORIES

Contextual Setting of the Study

Using a *critical incident* approach, respondents were asked to recall a dissatisfying experience that they could remember most clearly. This episodic elicitation has advantages of being theoretically defensible as dissatisfaction is an episode-specific construct, empirically sound as it facilitates memory recall by asking respondents to resurrect a salient dissatisfying incident, and pragmatically desirable as it helps in providing a reference point for assessing episode-specific variables.

One limitation of critical incident methodology is that it essentially is a recall design that may result in several undesirable biases (e.g., consistency factors, memory lapses) when both the complaint responses and their predictors are assessed within the same questionnaire (Landon 1980). Recognizing these problems, we used a modified critical incident approach in which respondents were asked to imagine that a dissatisfying experience similar to the one they had described had occurred again on their next visit. This approach is likely to reduce recall biases, although it does introduce some artificiality because of the hypothetical occurrence of the future incident. At the same time, because this hypothetical incident has relevance and significance to the respondent, it retains some validity. There is precedence for such design in satisfaction research (Scammon and Kennard 1983).

Three service categories were selected for this study. The selection of services rather than products was guided by two factors: (a) services entail greater dissatisfaction than do products (Best and Andreasen 1977) and (b) few studies have investigated consumers' responses to dissatisfaction with services. The service categories selected were automotive repair, medical care, and banking services. Dissatisfaction is among the lowest for banking services and among the highest for automotive repair (Day and Bodur 1977). In addition, automotive repair often has been studied in the CCR literature, and its inclusion in the present study offers a useful point of reference and comparison.

Data Collection

The population of interest was defined as households that had had a dissatisfying experience with a specific service category (e.g., automotive repair). Because sampling frames for such populations are not easily available, an alternative procedure was used by asking a random sample of households to preselect themselves if they could recall a recent dissatisfying experience. A sample of 1,000 households (per service category) was selected from the *Polk's Directory* and was mailed a survey packet. Follow-up involved reminder cards and telephone callbacks.

The number of responses received were as follows: automotive repair, 155; medical care, 166; and banking services, 172. True response rates cannot be estimated precisely because that would require calculating the proportion: (households that responded)/(households that had a dissatisfying experience with a specific service category). Because the denominator is an elusive number, telephone callbacks provided some estimate for this term. A total of 1,500 callbacks were made, 500 for each survey. A contact rate of about 80 percent was achieved after up to three callbacks. Of those contacted, at least 70 percent stated that they had not responded because they could not recall a dissatisfying experience with the service category specified. By contrast, households that had experienced dissatisfaction were eager to participate and "let someone know" about their problem. This implies a dissatisfaction rate of about 30 percent. In general surveys, reported

dissatisfaction rates range between 10 and 30 percent (Day and Bodur 1977). Using a liberal estimate of 30 percent, response rate estimates were as follows: automotive repair, 52 percent; medical care, 56 percent; and banking services, 57 percent. Respondents who could not recall a recent experience and cases with missing values were deleted, leaving usable responses as follows: automotive repair, 116; medical care, 125; and banking services, 104.

Measures of Study

Because well-tested measures for some constructs were not available, directions were sought from conceptual definitions provided by researchers (e.g., Day 1984; Singh 1990). The selection of items was based on consistency with conceptual definitions, similarity of item content across the three service categories, and (as far as possible) multiple-item measures for each construct. The initial drafts were pretested, and necessary modifications and revisions were made. A summary of the basis, conceptual definitions, item composition, and measurement characteristics of various constructs is shown in Table 2.

CREs were measured by a 10-item, 6-point (*very likely* to *very unlikely*) Likert scale developed by Singh (1988), who also reported on its dimensional structure. Based on confirmatory factor analysis, the fit statistics for this three-dimensional structure for CREs (i.e., voice, private, and third party) were as follows: (1) for automotive repair data, $\chi^2 = 49.6$, $df = 32$, $p = .024$, GFI = .89, AGFI = .82, CFI = .95, RMR = .065; (2) for banking services data, $\chi^2 = 51.07$, $df = 32$, $p > .01$, GFI = .88, AGFI = .80, CFI = .93, RMR = .06; and (3) for medical care data, $\chi^2 = 63.69$, $df = 32$, $p < .01$, GFI = .87, AGFI = .77, CFI = .92, RMR = .06. In addition, each dimension achieved a composite reliability of .69 or higher and met Fornell and Larcker's (1981) criterion for discriminant validity. All loadings were large and significant (t values > 2).

Attitude toward complaining was measured by five items adapted from Richins (1987) that assess an individual's personal norms concerning complaining to sellers. Upon factor analyzing, a single factor was dominant in each of the three service data, explaining more than 70 percent of the total variance; also, the scree plot indicated a clear break after the first eigenvalue. The alpha reliability of this measure ranges between .73 (for automotive repair) and .81 (for medical care).

EV judgments involved 18 items from Day (1984) that measured EV judgments for nine consequences resulting from voice, private, and third-party complaint responses. These measures were operationalized and worded in a manner suggested by Bagozzi (1982). Upon multiplying the expectancies and values, nine EV judgments were obtained. Composite indicators were developed for EV judgments for voice, private, and third-party complaints by summing over the corresponding measures. This procedure for summing relevant product terms of expectancies and values to arrive at overall judgments is consistent with traditional formulations of EV theory (Bagozzi and Heatherton 1994).

TABLE 2
Summary Statistics and Reliabilities for Variables of Study

Study Variable	Automotive Repair			Medical Care			Banking Services		
	Mean (X)	SD (σ)	Reliability (α)	Mean (X)	SD (σ)	Reliability (α)	Mean (X)	SD (σ)	Reliability (α)
Voice CRE	0.27	0.77	.70	–0.12	1.10	.80	–0 05	1.08	.81
Private CRE	0.37	0.94	80	0 36	1.04	.80	–0 28	0 90	.68
Third-party CRE	0.31	1.05	80	0 20	1 10	.85	–0 15	0 95	.85
EV-voice	0 07	0.92	.88	–0.35	1.05	94	0 05	1.14	.94
EV-private	0 25	0.95	.50	0.25	1 05	60	–0.26	1.04	.64
EV-third party	0 02	0.84	.72	–0.24	0.83	.64	–0 27	1.10	.79
Attitude toward complaining	0 20	0.90	73	–0 22	1 01	.81	–0.23	1.06	77
Alienation	0.01	0.95	.74	0.31	1.15	.86	–0 14	1.04	84
Prior experience	0.13	1 57	—	–0 43	1.32	—	–0.27	1.59	—
Attribution of blame	–0.27	0 70	—	1 24	0 92	—	–0 43	0.68	—

NOTE: All variables were standardized by first pooling the data from the three service categories and transforming the variables so that the pooled mean was zero and the pooled standard deviation was unity. X is the estimated mean value, σ is the estimated standard deviation, and α is the estimated reliability The reliability estimates are based on Cronbach's alpha (cf Nunnally 1978) CRE = complaint response estimate; EV = expectancy value. Dashes indicate measures for which alpha reliability is not relevant.

Attribution of blame was assessed by three items using a three-category *agree/disagree* scale. Respondents indicated who they felt was responsible (i.e., locus) for the dissatisfaction that they had experienced. Because the attribution construct was formulated as a formative measure, the responses to the three items were summed (after reverse scoring) so that higher values indicated that the provider was responsible for the problem.

Consumer alienation was measured by seven items adapted from Allison (1978). The correlation matrix of the seven items was input to common factor analysis. The breaks-in-scree-plot criterion indicated a single factor (eigenvalue = 3.25) that explains 47 percent of the total variance. The alpha reliability exceeds .74 in each of three data sets.

Prior experience was measured as the number of times respondents had complained to service providers and/or reported their dissatisfaction to any "public" agency (e.g., the Better Business Bureau). A period of 6 months was specified so as to provide a common time frame. The prior experience construct was posited as a formative construct (Bollen and Lennox 1991).

Dissatisfaction intensity was operationalized by asking respondents how they felt after experiencing the situation they had described. The 10-point rating scale was anchored by *not dissatisfied at all* and *completely dissatisfied*.

Method of Analysis

The hypothesized model was analyzed by the method of path analysis (Loehlin 1987). Compared to regression, the use of path analysis has several advantages. First, path analysis allows a simultaneous test of a system of theoretical relationships involving multiple dependent variables. Second, this approach allows for "restricted" models with systematic constraints on relationships among variables. A key implication is that models can be tested that include

only those paths that are hypothesized a priori. Third, the use of path analysis facilitates analysis of model fit based on the assessment of residuals and a χ^2 statistic. In addition, various goodness-of-fit indexes are available to judge model fit. Finally, this approach facilitates model validation with multiple samples. The notion of validity does *not* imply that structural coefficients are identical across the three service categories. Rather, the sufficient condition is that the *pattern* of nomological relationships in the hypothesized model yields a reasonably good fit in all three service data sets. Indeed, if positive validation results are obtained, then comparison of coefficients across the three data sets provides insights into the variability of modeled relationships due to differences in service categories. For this reason, we analyzed covariance matrices and used unstandardized path coefficients for drawing substantive conclusions. Because measurement scales have arbitrary variances and means, the data sets were transformed by pooling the automotive repair, medical care, and banking services data; standardizing all measures ($\mu = 0$, $\sigma = 1$); and recovering the automotive, medical, and banking data sets for separate analysis. Finally, in accord with procedures for path analysis, single composite indicators were used for each construct with the error terms adjusted for the reliability of the composite measure.

RESULTS

Validation of the Hypothesized Model

The results from fitting the model in Figure 1 to the three service data sets are in the lower panel of Table 3. For automotive repair data, the hypothesized model resulted in a χ^2 of 16.6 ($df = 12$, $p = .17$) and a CFI of .97. In addition, the average of the standardized residuals on the off diagonals (AOSR) was less than .02. Because "good" fitting

TABLE 3
Overall Model Fit and Estimated Path Coefficients Across the Three Service Categories

Coefficient and Hypothesis	Automotive Repair	Medical Care	Banking Services
Dependent variable· Voice CRE			
Attitude → voice (H3a)	n.s	n.s	0 28 (1.9)*
EV-voice → voice (H4a)	0 38 (2 6)***	0 34 (2 6)***	0 72 (7 4)***
EV-private → voice (H5b)	0 46 (3.1)***	0 63 (5 0)***	0 26 (1.8)*
Prior → voice (H9a)	0.23 (2 2)**	n s.	n.s
Dependent variable: Private CRE			
Attitude → private (H3b)	0.24 (2.0)*	−0 30 (−2 8)***	n s
EV-private → private (H4b)	0.48 (3.5)***	0 90 (6 8)***	0 77 (3 2)***
EV-voice → private (H5a)	−0 29 (−2.5)***	−0 30 (−2 5)***	−0.36 (−2.8)**
Prior → private (H9b)	n.s.	n s.	n.s.
Dependent variable: Third-party CRE			
Voice → third party (H1)	n s.	0 20 (1.9)*	n s
Private → third party (H2)	0 45 (4 4)***	0.39 (3.5)***	0 38 (3.4)***
Attitude → third party (H3c)	0 21 (1 7)*	n s	n s
EV-third → third party (H4c)	0 29 (2.7)***	0 40 (2 6)***	0 66 (5.6)***
Prior → third party (H9c)	n s.	n s	0 15 (1.5)*
Dependent variable: EV-voice			
Attribution → EV-voice (H6a)	n.s.	n s	0 20 (2 3)**
Alienation → EV-voice (H7a)	−0 41 (−4.0)***	−0 54 (−4.6)***	−0 52 (−5 7)***
Prior → EV-voice (H8a)	n s	0.15 (1 7)*	0 19 (1 7)*
Dependent variable· EV-private			
Attribution → EV-private (H6b)	0 35 (2.9)***	0 16 (1.6)*	n s.
Alienation → EV-private (H7b)	0 30 (2 5)**	0 40 (2 8)***	0 28 (2 1)**
Prior → EV-private (H8b)	n.s.	n s	n.s
Dependent variable. EV-third party			
Attribution → EV-third party (H6c)	n s	n s	− 27 (−2 3)**
Alienation → EV-third party (H7c)	n s	n s	n s
Prior → EV-third party (H8c)	n s.	n s	n s
Dependent variable: Attitude toward complaining			
Alienation → attitude (H7d)	0 30 (2 4)**	n s	0 34 (2 6)**
Prior → attitude (H8d)	0 22 (2 0)**	0 34 (3 4)***	0 31 (2 3)**
Overall goodness-of-fit statistics			
χ^2	16 6	9 7	14 2
df	12	12	12
p value	17	64	28
AOSR	.02	02	02
NFI	92	95	.95
CFI	97	1.0	1.0
R^2 for voice CRE	.40	55	77
R^2 for private CRE	48	65	71
R^2 for third-party CRE	.55	50	64

NOTE Unstandardized coefficients are shown with their corresponding t values based on robust standard errors in parentheses. Paths that were not estimated are not shown in the table All significance tests are based on one-tailed t tests. n s. = nonsignificant coefficient CRE = complaint response estimate, EV = expectancy value
$*p < 05, **p < .01, ***p < .001$

models are characterized by p values > .05, AOSR < .06, and CFI > .90 (Bentler 1989), it is apparent that the fit of the hypothesized model to automotive repair data is reasonably good. Likewise, the results for medical care and banking services data sets reveal strong support for the validity of the hypothesized model. For medical data, we obtain a nonsignificant χ^2 statistic of 9.7 ($df = 12, p = .64$), fit indexes in the range of .95 or higher (CFI = 1.0), and insignificant residuals (AOSR = .02). The hypothesized model also yields a good fit to the banking data with a χ^2

of 14.2 ($df = 12, p = .28$), CFI = 1.0, and AOSR = .02. This consistent evidence appears compelling and points toward the validity of the underlying model.

Estimated Path Coefficients

For voice CRE, Table 3 reveals that EV-voice assessing the probability of outcomes and value of voice actions is a consistent, positive, and significant predictor across the three service data sets. This is in accord with Hypothesis 4a.

Likewise, EV-private is found to consistently, significantly, and positively affect voice CRE. Although this is consistent with Hypothesis 5b insofar as its significance is concerned, its direction is opposite. We had expected that increased EV for private responses would reduce the likelihood of voice responses; instead, our data show that this likelihood is increased. Attitude toward complaining was posited to influence voice responses (Hypothesis 3a) but is supported only for banking services data. Finally, prior experience was posited to influence voice CRE (Hypothesis 9a), but support is obtained for automotive repair data only.

The results for *private* CRE also evidence several consistent and significant paths across the three service categories. EV-voice is consistently, significantly, and *negatively* related with private responses, indicating that increasing the probability and value of redress results in a weakening of behavioral tendencies to complain privately. This is consistent with Hypothesis 5a. Likewise, as hypothesized, EV-private is *positively* and significantly associated with private responses irrespective of service category (Hypothesis 4b). Because EV-private reflects consumers' expectancies of behavioral responses from private actions (e.g., friends would be more careful and/or would stop patronizing), it appears that private responses are not motivated merely by informational considerations but also by an intent to influence actions of friends and relatives. Interestingly, attitude has a significant *positive* effect in automotive repair data but has a significant *negative* coefficient in medical care data (cf. Hypothesis 3b). Positive attitudes toward complaining enhance private responses when the dissatisfaction involves automotive repair problems but tend to inhibit complaining to friends and relatives and/or switching tendencies (i.e., exit) when medical problems are involved. In general, prior experience has insignificant effects.

For *third-party* CRE, consistent and significant effects are obtained for private and EV-third. Consumers' intentions to engage in private responses have a strong positive influence on their third-party responses irrespective of service category. This supports our a priori hypothesis, Hypothesis 2. By contrast, the influence of voice CRE on third-party CRE is *nonsignificant* for the automotive repair and banking services categories but is significant and consistent with Hypothesis 1 for medical care. Additionally, the consistent, significant, and positive results for the effect of EV-third on third-party CRE confirm our hypothesis that third-party responses are cognitively based and relate positively to EV of consequences of third-party actions (Hypothesis 4c). Note that attitudes have a positive effect on third-party responses but only for automotive repair data (Hypothesis 3c). Finally, past experiences increase the probability of third-party actions for banking services.

With respect to EV judgments, some consistent results are obtained for EV-voice and EV-private but not for EV-third. This is not surprising given that the empirical model did *not* seek to include all of the key antecedents of EV judgments; rather, it focused on key antecedents of CREs. Nevertheless, alienation has a consistent, signifi-

cant, and *negative* effect on EV-voice irrespective of the service category (Hypothesis 7a). Also, alienation has a *positive* and highly significant influence on EV-private regardless of service category (Hypothesis 7b). As such, it appears that alienated consumers tend to voice less but engage more in private responses. Moreover, prior experience significantly and positively increases the EV of voice responses for medical care and banking services (Hypothesis 8a) but has nonsignificant effects for EV-private irrespective of service category (Hypothesis 8b). Finally, significant positive effects for attributions are obtained for EV-voice for banking services data and for EV-private regarding automotive repair and medical care (Hypothesis 6). As such, it appears that effects of attributions of blame on CREs are mediated by EV judgments. For EV-third, the effects are mostly isolated.

For *attitude toward complaining*, prior experience results in a consistent, significant, and positive effect on attitude irrespective of the service category involved (Hypothesis 8d). This appears to support the self-reinforcing aspect of CRE phenomenon: increasing experience of complaining reinforces a positive attitude toward complaining. Also, alienation yields a consistent positive influence on attitudes in automotive repair and banking services data, in accord with Hypothesis 7d. Apparently, increasing alienation from the marketplace translates into a more positive attitude toward complaining.

Moderating Effects of Dissatisfaction Intensity

We used a multiple group analysis that involved estimating a path model separately for high and low dissatisfaction for each service category. Note that the moderating hypothesis is supported if the hypothesized model fits the data irrespective of the dissatisfaction intensity and that path coefficients vary substantially across the dissatisfaction groups. The high and low groups were obtained by a split at the overall mean value. Readers will note that, given the usable responses of 104 to 125 across the three service categories, the number of cases in each subgroup is rather small; however, as per Hypothesis 10, a partial path model involving key antecedents of CREs only (i.e., EVs, attitudes, prior) was fitted in the high and low groups. This limits the number of paths estimated for each subgroup. In addition, we used a robust procedure in maximum likelihood analysis to examine the significance of the estimated coefficients using robust standard errors. Taken together, this ensures that the possibility of Type I errors is limited to the nominal level set at 10 percent.

The overall fits for the low dissatisfaction groups were as follows (see lower panel of Table 4): (1) for automotive repair, $\chi^2 = 1.75$, $df = 5$, $p = .88$, CFI = 1.0, AOSR = .01; (2) for medical care, $\chi^2 = 6.19$, $df = 5$, $p = .29$, CFI = .99, AOSR = .02; and (3) for banking services, $\chi^2 = 5.96$, $df = 5$, $p = .30$, CFI = .99, AOSR = .02. These statistics suggest that the partial model is able to account for the variable covariances irrespective of the service category. In addition, the R^2 values for voice, private, and third-party CREs

TABLE 4
Estimated Path Coefficients for High and Low Dissatisfaction Groups
Across the Three Service Categories

Coefficient and Hypothesis	Automotive Repair		Medical Care		Banking Services	
	Low	High	Low	High	Low	High
Dependent variable: Voice CRE						
Attitude → voice (H3a)	0.24 (1.4)*	n s	n.s.	n.s.	0.42 (2.2)**	0.19 (1.3)*
EV-voice → voice (H4a)	0 53 (2 9)***	0.46 (1.7)**	0.33 (2.2)**	0.33 (1 7)**	0 72 (4 6)***	0 78 (6 7)***
EV-private → voice (H5b)	0.34 (1.7)*	0.61 (2.4)***	0.40 (1.7)**	0.66 (4.1)	n.s.	0.29 (1.9)
Prior → voice (H9a)	0 26 (1.7)*	0.20 (1.4)*	n s	n s	n s	n s.
Dependent variable: Private CRE						
Attitude → private (H3b)	n.s	0.27 (1.3)*	−0.51 (−2.5)***	−0.30 (−1.86)**	n s	0.40 (1.7)**
EV-voice → private (H4b)	−0.31 (−2.0)**	n.s.	−0.38 (−3.8)***	n s	−0.82 (−3.9)***	n s
EV-private → private (H5a)	n s.	0.89 (7.1)***	0.98 (3.1)***	0 99 (3 2)***	0 59 (2.2)**	0 52 (2 5)***
Prior → private (H9b)	−0.15 (−1.7)*	n s	n.s.	n s	n s.	n s
Dependent variable: Third-party CRE						
Attitude → third party (H3c)	n s.	n s	n.s.	n s.	n s.	−0.41 (−1.5)*
Voice → third party (H1)	n.s.	n s	0.28 (2.2)**	n.s.	0.49 (2.4)***	n.s.
Private → third party (H2)	0.41 (2.8)***	0.59 (3.5)***	0.40 (3.2)***	n s	0.49 (2.4)***	0.63 (2.8)***
EV-third → third party (H4c)	0.27 (1.6)*	0.38 (2.7)***	0.32 (1.7)*	0.99 (8.6)***	0.39 (2.7)***	0.77 (5.1)***
Prior → third party (H9c)	n.s.	0 17 (1 4)*	n s	n s.	n s.	0.35 (3.9)***
Overall goodness-of-fit statistics						
χ^2	1 75	5 0	6 19	6 07	5 96	4.90
df	5 0	5 0	5 0	5 0	5 0	5 0
p value	88	.42	29	80	30	42
AOSR	01	02	.02	03	02	02
NFI	.98	.93	95	.90	94	95
CFI	1.00	98	.99	1 00	99	99
R^2 for voice CRE	46	.53	32	66	42	78
R^2 for private CRE	23	90	85	95	62	65
R^2 for third-party CRE	.42	78	45	90	66	.94

NOTE: Unstandardized coefficients are shown with their corresponding t values based on robust standard errors in parentheses. Paths that were not estimated are not shown in the table. All significance tests are based on one-tailed t tests Additional hypotheses were tested to examine whether the path coefficient is invariant across the low and high dissatisfaction groups Significant differences ($p < 10$) are in boldface type. n s = nonsignificant coefficient CRE = complaint response estimate; EV = expectancy value
*$p < 10$, **$p < 05$, ***$p < .01$.

are significant, ranging from .23 to .85 (mean = .50). Likewise, the fit statistics for the high dissatisfaction groups were as follows: (1) for automotive repair, $\chi^2 = 5.0$, $df = 5$, $p = .42$, CFI = .98, AOSR = .02; (2) for medical care, $\chi^2 = 6.07$, $df = 5$, $p = .80$, CFI = 1.0, AOSR = .03; and (3) for banking services, $\chi^2 = 4.9$, $df = 5$, $p = .42$, CFI = .99, AOSR = .02. Significantly, the R^2 values for voice, private, and third-party CREs range from .53 to .95 (mean = .78). Clearly, the partial model fits the data well across both high and low dissatisfaction groups.

Table 4 provides estimated coefficients for the high and low dissatisfaction groups. Several differences are noteworthy. First, for voice CRE, attitudes have a significantly greater positive effect when dissatisfaction is low than they do when dissatisfaction is high for the automotive repair and banking services categories. This is in accord with Hypothesis 10a. By contrast, EV-private has a stronger effect when dissatisfaction is high than it does when dissatisfaction is low regardless of service category. This supports Hypothesis 10b. However, the effect of EV-voice is invariant under high and low dissatisfaction. Finally, the influence of prior experience is invariant and significant for the automotive repair category only.

Second, the effect of EV-voice on private CRE is nonsignificant for high dissatisfaction but is highly significant and negative for low dissatisfaction. This implies that EV judgments for voice are less potent in counteracting the influence of EV-private when dissatisfaction is high. The influence of EV-private is invariant, however, except for automotive repair, where its effect is consistent with Hypothesis 10b. In addition, the influence of attitudes on private CREs is positive and significant for high rather than low dissatisfaction in the automotive repair and banking services categories. In the medical care category, the effect of attitudes is negative and significantly more so when dissatisfaction levels are low. Finally, the influence of prior experiences is invariant but largely nonsignificant.

Third, for third-party CRE, the influence of voice CRE is stronger under low dissatisfaction than it is under high dissatisfaction in the medical care and banking services categories. Likewise, the effect of private CRE is significantly stronger under low dissatisfaction in the medical care category but is invariant and significantly positive otherwise. More significantly, the influence of EV-third is positive and significantly stronger for high satisfaction than it is for low dissatisfaction. This is in accord with

Hypothesis 10b. Finally, although the effect of attitudes is largely nonsignificant (and invariant), the influence of prior experiences is positive and significantly larger for high dissatisfaction in the cases of the automotive repair and banking services categories. Nonsignificant effects are obtained in the medical care category.

DISCUSSION

Our results should be evaluated in the light of certain limitations. First, it was not possible to include all potential CRE antecedents. Although it is impossible to address this limitation within a single study, future researchers may wish to explore the effects of antecedents not included in our study (e.g., controllability and stability dimensions of attribution, psychological variables such as aggressiveness and assertiveness). Second, our study is based on correlation data from a cross-sectional design. The usual caveats for determining sequential effects from such data are applicable. Of course, for a more realistic view, longitudinal designs could be conducted so that process and outcome variables can be assessed more accurately. In this regard, our modified critical incident methodology has some pros and cons. Although this approach reduces memory-related biases, it may allow consistency-related biases to creep in due to the imaginary occurrence of the future dissatisfying incident resulting in overstated R^2 values. Readers will note that our focus is on a system of nomological links rather than mean values or bivariate correlations; as such, it is unlikely that common method or consistency-based halo bias would cause the differential pattern of relationships across the different antecedents and service categories given that such biases usually work against differential validity. Further, we followed a research design—respondent confidentiality and surveys mailed directly from/to academic researchers—that is likely to yield less biased responses. The dependent variables in our study are CREs, not CCRs. Although CREs are posited to be direct antecedents of actual complaint behaviors (CCRs), in many instances structural impediments (e.g., complaint procedures) and/or personal constraints (e.g., time pressure) might interfere in this correspondence. Meaningful insights could be obtained by examining the relationship between CREs and CCRs. Finally, although response rates of the order obtained here are not unusual, less than perfect response rates could potentially affect the results obtained.

Neverthless, to our knowledge, this study represents the first attempt to test and validate a model of CRE processes. In the following, we discuss the key substantive and managerial implications.

Substantive Issues and Theoretical Implications

The final column of Table 1 summarizes the findings from the present study and contrasts them with results from past research (see fourth column of Table 1). We discuss the key contributions in the following subsections.

CCR Model and Influence Pathways

Our study advances past research by building on the efforts of Day (1984), Singh and Wilkes (1991), and Blodgett and Granbois (1992). The hypothesized model was a reasonable fit to each of the three service categories, yielding explanation levels (i.e., R^2s) exceeding .50 for each CRE dimension. The only exceptions are the R^2 values for voice and private CRE in automotive repair data, which fall short of .50 but exceed .40. Such levels of explained variance have not been achieved in past research. Thus, although there is sufficient evidence to suggest that the proposed model is conceptually meaningful, empirically valid, and pragmatically sound, we view our proposed model as an initial step that warrants the attention of future CCR researchers.

Our results also provide insights into the influence pathways for CREs. Note that voice CRE is affected primarily by EV-voice and EV-private, whereas private CRE is dominated by attitude toward complaining, EV-private, and EV-voice. Finally, EV-third and private CRE are the key factors affecting third-party CRE. More critically, EV-voice has a negative influence on private CRE, but its effect on voice CRE is positive. These contrasting effects hold important implications for researchers and managers alike (to be discussed) and suggest that voice, private, and third-party CRE are characterized by disparate influence pathways. This disparity argues for the significance of the tripartite CRE taxonomy. Thus studies that fail to account for the multidimensionality of CRE and/or examine selected CREs are likely to yield an incomplete picture of the underlying processes.

Understanding CRE Antecedents

The advantage of incorporating multiple CRE dimensions within a unitary model is that it facilitates understanding of the relative and disparate effects of CRE antecedents rooted in different theoretical perspectives. Not surprisingly, the key antecedents are the EV judgments rooted in Hirschman's (1970) economic perspective. By contrast, the effects of attitude toward complaining appear weak and less consistent. This supports conventional wisdom that complaining is fundamentally a cognitively driven activity. Nevertheless, the pattern of EV effects is complex and refines conventional wisdom. Specifically, it is clear that, irrespective of the service category, (1) the likelihood of each CRE increases *directly* with increasing probability and value of its consequent goals, (2) *positive crossover* effects are obtained for the influence of EV-private on voice CRE and of private on third-party CRE, and (3) *negative crossover* effects are obtained for the path between EV-voice and private CRE. Whereas the direct effects are compatible with the intuitive view of CCRs, crossover effects need further discussion. With increasing probability and value of obtaining "private" goals (i.e., EV-private), consumers apparently are more motivated to engage in private and voice actions. In turn, private CREs increase the propensity of third-party actions. Thus the goals of "getting even" reflected in private consequences, including seller boycott and spreading negative word of mouth, appear to underlie broader consumer motivations

to engage in multiple complaint responses. Singh (1990) has characterized these motivations as indicative of an activist consumer who "utilizes all channels of complaining." However, increasing probability and value of obtaining voice goals (i.e., EV-voice) is associated with greater likelihood of voice actions but, at the same time, *reduces* the propensity for private actions. Thus, as the goals of "redress" through direct voicing become more probable, dissatisfied consumers are less likely to engage in private responses. Instead, they are more likely to engage in a unitary response: voice complaint to the service provider.

Three implications follow from these results. First, although private responses are highly potent in amplifying complaint responses, they are mainly invisible to the service provider and are not easily influenced. However, increasing the probability of and reducing the effort in obtaining redress provides service providers an indirect but effective (and perhaps the only) mechanism for controlling the deleterious effects of private responses. Second, further development of the role of EV judgments appears warranted. A promising avenue is to incorporate separate EV judgments for "success" and "failure" of various CCR options parallel to Bagozzi and Warshaw's (1990) theory of trying. Third, our results support the use of goals in understanding CCR processes. An avenue that warrants attention is the notion of self-efficacy. In our context, self-efficacy represents the degree of confidence or competency that a consumer has in his or her own ability to perform CCRs. As such, this construct is different from EV judgments and CREs, and its inclusion in CCR models is likely to yield interesting insights.

Concurrently, important relationships emerge between alienation and EV judgments, prior experience of complaining and EV-voice, and attributions of blame and EV-private. Alienated consumers have significantly *lower* perceptions about the probability and value of redress (EV-voice) and see considerably *higher* probability and value in exit and negative word-of-mouth actions (EV-private). This suggests that consumers' global feelings toward the marketplace help shape their evaluations of goal attainment in voice and private actions. A rationale for this link is based on performance ambiguity arguments. Goal attainment in complaint episodes may be subject to a high level of ambiguity (e.g., Will I be hassled? Will I get redress?) because of the inherent idiosyncratic nature of dissatisfaction, given that each problem is unique. Faced with performance ambiguity, it is likely that consumers draw on their global evaluations to infer outcome probabilities for complaint actions (e.g., voice). An alternative explanation rests on the disparate goals of voice and private actions. It is likely that voice actions are motivated by goals of redress and loyalty, whereas private actions may be driven by getting even and punitive aims. If so, then feelings of alienation from sellers are consistent with private response and are inconsistent with voice actions.

Our research also helps to clarify the role of past behaviors in complaint response processes. Prior experiences appear to have a moderate and significant influence on voice CRE either directly (automotive repair) or mediated by EV-voice (medical care and banking services). In addition, past behaviors were found to influence third-party CRE for banking services. When combined with the results for EV judgments, it appears that complaint responses can be located on the mindful/mindless continuum (Bagozzi and Warshaw 1990) as being toward the mindful end point (i.e., self-generated reasoned acts) such that resulting CREs manifest independent contributions of information processing-based EV evaluations and scripts based on past behaviors. Thus our results appear to encourage full accounting of the role of past behaviors in future CCR models. As such, the use of "frequency," "recency," and "success" of past behaviors is likely a fruitful area for future research.

Interesting and unexpected results emerge for the role of attribution of blame. Most previous studies have examined the direct effects of attributions on complaint responses. We had posited that attributional effects would be mediated by EV judgments. Although this idea is supported in our data set, the specific influence pathways are noteworthy. For banking services, attributions significantly influence EV-voice, which in turn affects voice CRE. For automotive repair and medical care, attributional effects are mediated by EV-private; that is, attributions positively affect EV-private, which in turn has a positive effect on voice and private CREs. As hypothesized, the influence of attributions on third-party CRE is further mediated by voice and private CREs. This implies that, in contrast to its "proximal" status in past studies, attribution of blame is a "distal" construct in CCR processes. Although we discussed the rationale for mediation by EV judgments earlier, the effects obtained for EV-private deserve further comment. When the seller is blamed for the problem, dissatisfied consumers likely consider getting even as their key goal by using the exit option and spreading negative word of mouth among their friends and relatives. In addition, when consumers attribute the problem to service providers, it is likely that they are more committed to complaining. Of course, this results in increasing the likelihood of voice *and* private responses. If supported in future research, this notion of getting even motivated by attributional considerations provides new insights into the attributional role in understanding when consumers complain.

Role of Dissatisfaction Intensity

We provide a theoretical rationale and empirical evidence for a moderating role of dissatisfaction intensity in CCR processes. Based on self-regulatory mechanisms, we argue that dissatisfaction intensity supplies the motivational link between EV judgments and CREs. Our results provide support for this position because, whereas the hypothesized model provides reasonable fit to data from both high and low dissatisfaction, important differences are obtained in structural coefficients and R^2 values. In particular, our data yield significantly higher explanation levels under high dissatisfaction than they do under low dissatisfaction. In addition, the relationships between (1) EV-private and voice and (2) EV-third and third party are significantly higher for high dissatisfaction than they are for low dissatisfaction. Consistent with this, the effect

of attitudes on voice CRE is more dominant under low dissatisfaction than it is under high dissatisfaction (except for medical care), whereas opposite effects are obtained for the influence of attitudes on private CRE (except for medical care). An interesting insight is that the counteracting influence of EV-voice on private CREs becomes less potent as dissatisfaction intensity increases. Although our hypotheses were exploratory insofar as moderating effects are concerned, our results are encouraging and open new avenues for incorporating dissatisfaction intensity into CCR models.

Variations Across Service Categories

Our results yield important differences across service categories including the relationship between EV-voice and voice (twofold stronger for banking services than for medical care or automotive repair), EV-private and voice (strongest for medical, least for banking), attitudes and private (positive for automotive, negative for medical), EV-private and private (strongest for medical, least for automotive), and EV-third and third party (higher for medical and banking than for automotive).

Although we discuss this pattern of differences next, it is useful to view the nature of the three service industries from the perspective of consumer dissatisfaction. The automotive repair industry is characterized by a large number of suppliers, a high level of consumer dissatisfaction, few hindrances (e.g., effort) in complaining, and a high level of complaint activity. Several studies report that voicing and other complaining rates are among the highest for the automotive repair industry (Day and Bodur 1977), yet consumers find this industry only moderately responsive to their complaints (Singh 1991). The medical care industry is viewed as a "loose monopoly" that has a limited number of suppliers, a high level of consumer dissatisfaction, significant barriers (psychological and otherwise) in complaining, and a low level of complaint activity (Andreasen 1985). As such, consumers have a high level of "unrecovered" dissatisfaction; they are less prone to voice and/or exit and are more likely to view physicians as unresponsive (Singh 1991). The banking services industry lies somewhere in between as it is characterized by a limited but expanding number of suppliers, a low level of consumer dissatisfaction, few hindrances in complaining, and a low level of complaint activity (Day and Bodur 1977). Additionally, banking is noted for long-term relationships and switching is less frequent.

The pattern of variations can be interpreted in the preceding context of industry differences. The effect of EV-voice on voice CRE is stronger in banking services, presumably because consumers have invested significant specific assets in this relationship and, consequently, are motivated to preserve this relationship by voicing complaints directly to the service provider. This contrasts with medical care in that, although switching physicians is not a common option, consumers are less motivated to voice perhaps because of structural hindrances and a perceived lack of physician responsiveness. This results in a weaker relationship between EV-voice and voice. In the automotive repair industry, this relationship is also weak but

probably for a different reason. Because of the easy availability of other complaint actions (e.g., exit) and the lower prevalence of long-term relationships with one's automotive repair shop, consumers are less likely to expend the effort needed to voice. Consistent with this, EV-voice *reduces* the likelihood of private CREs more so in the banking services industry than in the medical care and automotive repair industries. In fact, Table 4 reveals that, under low dissatisfaction, this negative crossover effect is twofold stronger in the banking data relative to medical and automotive data.

The influence of EV-private on private follows a pattern that contrasts with the preceding effects for EV-voice. In the medical industry, this influence is the strongest and is unaffected by the level of dissatisfaction (see Table 4). Apparently, consumers thwarted in their ability to voice turn to private actions with vigorous intensity. In the automotive repair industry, similar levels of intensity are evident under high dissatisfaction, although the reason probably lies in dissatisfied consumers' punitive motivations to make automotive repair shops pay for their mistakes. Under low dissatisfaction, this influence is absent. In the banking services industry, the influence of EV-private on private actions is at a lower intensity level and, like the medical care industry, does not vary across dissatisfaction levels. Consistent with this, the influence of EV-private on voice is more potent for medical care and automotive repair data (for reasons enumerated earlier) and under high dissatisfaction than it is either for banking services data or low dissatisfaction (see Table 4).

Two additional patterns involve the influence of EV-third and attitudes. The influence of EV-third on third-party actions is stronger in banking services and medical care than it is in automotive repair. Presumably, this is because medical care and banking services involve problems that are of greater consequences (e.g., health and money) than do automotive-related problems. As such, consumers are more prone to expend the effort necessary to pursue third-party options for consequential problems. Consistent with this, the effects of EV-third invariably are higher under high dissatisfaction. In terms of attitudes, the effects on private are positive for automotive repair but are negative for medical care. Because attitudes are conceptualized as "complaining to service providers," one plausible reason is that, for problems of a personal nature such as medical care, even consumers who have positive attitudes toward complaining may find it difficult to talk to their friends and relatives (due to the personal nature of a problem) or to exit from a long-term relationship with a physician (due to binding contracts). In automotive repair, complaining is more frequent and the problems are less personal. This probably accounts for the positive relationship of attitudes and voice/private.

Managerial Implications and Recommendations

In a recent debate about managing consumer complaints, Nemeroff (1990) observed that every business

should aim to close its customer complaint department because "problem prevention, not problem resolution, is a superordinate service quality objective" (p. 20). Few would argue with Nemeroff that problem-free service ought to be the *goal* of firms in today's business environment, yet few are likely to agree with Nemeroff that such a goal is *realistic* for most firms given the diversity of consumer needs and wants. For services, this is germane because service delivery often is subject to intangibility, simultaneity, unpredictability, and inseparability. Consequently, the reality is that despite the best intentions of the marketers, customer dissatisfaction persists. At the same time, managers should not view customer dissatisfaction hopelessly. Rather, the emerging view is that dissatisfaction can be managed—in most cases successfully. Our results refine this view by providing recommendations for managers who wish to manage customer dissatisfaction in automotive repair, medical care, and banking services. The specific implications are as follows:

- Consumers' *perceptions* of sellers' responsiveness to voiced complaints and the value they see in sellers' redress actions (i.e., EV-voice) are pivotal elements in determining CREs because of the following reasons:

    1. EV-voice has a *direct* positive effect on voice CRE, indicating that consumers with more positive perceptions of sellers' responsiveness are more likely to complain to sellers; thus sellers are offered a chance for a *recovery*.

    2. EV-voice has a *direct* negative effect on private CRE, suggesting that consumers with high EV-voice are less likely to engage in exit and negative word-of-mouth CCR. However, this effect dissipates with increasing dissatisfaction.

    3. Because private CRE directly affects third-party CRE, EV-voice has an *indirect* effect on third-party responses. The more the consumers perceive that sellers are responsive, the less likely they are to engage in private and, in turn, third-party CREs.

- Managers might find it useful to manage their firm's responsiveness to voiced complaints *as perceived by the consumers*. This will require more than just lip service, advertising, or developing a complaint-handling policy. Rather, it will require developing a customer service focus within the firm (see Zemke and Schaaf 1989) that can help permeate a sense of customer responsiveness at most, if not all, points of customer contact.

- Alienated consumers apparently view sellers as relatively less responsive, tend to have more positive attitudes toward complaining, and perceive greater benefits in exit and negative word-of-mouth responses. Thus, for managers, alienated consumers pose problems as they appear to defy recovery and propagate their dissatisfaction (through negative word of mouth). By definition, alienation is less amenable to direct influence by individual managers. Collective action at the industry level may be

necessary. Industries such as automotive repair, medical care, and banking services may especially wish to consider collective actions to manage consumer alienation.

- The *conversion* rate for voice, or the strength of relationship between EV-voice and voice CRE, varies across the three service categories. The voice conversion rate is highest for banking services and lowest for medical care. By contrast, the private conversion rate, or the strength of relationship between EV-private and private CRE, is highest for medical care and lowest for banking services. If these patterns indicate dissatisfied consumers' efforts to get even, then managers need to attend to factors that enhance the voice conversion rate by removing voice impediments.

Paradoxically, to strive toward Nemeroff's (1990) goal of *closing* customer complaint departments, firms will have to first *empower* such departments. Only by viewing complaints as opportunities can firms begin to achieve goals of problem-free service. As Plymire (1991) observes succinctly,

> The fastest way to develop a customer focused culture is by generating complaints. If employees can facilitate the expression of complaints, 94 percent of customers will air their issues instead of just 4 percent. Instead of voting with their feet, customers will stand and be counted. (pp. 40-41)

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