A Relationship Marketing Perspective of Complaint Satisfaction in Service Settings: Some Empirical Findings

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ABSTRACT

Three alternative conceptualizations of the complaint satisfaction construct are developed from a review of the literature. These alternative conceptualizations are then tested empirically using confirmatory factor analysis and structural equation modeling with data generated from a survey of some 2,000 complainants of a German passenger service company. Two of the three alternative conceptualizations of complaint satisfaction are shown to adequately represent the construct’s structure. In addition, the results underline the importance of customer-oriented complaint handling for relationship marketing success, since complaint satisfaction is shown to strongly influence the customer’s degree of overall satisfaction with the service provider’s offerings. Implications and insights for more effective management and handling of customer complaints and for future research in this area are also discussed.
The way service companies manage customer complaints has received growing attention from marketing scientists, in part as a side effect of the rise of the relationship marketing concept (see, for example, Stephens and Gwinner 1998; Tax, Brown, and Chandrashekaran 1998). A basic assumption of most of the research in this area is that companies are able to compensate for the anger and dissatisfaction that has led to the articulation of a customer complaint by competently managing this complaint in a customer-oriented way. In this context, the complaint satisfaction construct plays a focal role, since it is usually assumed that the customer’s satisfaction with the way the company handles his or her complaint has a significant influence on the complainant’s subsequent repurchasing and communicative behavior. Complaint satisfaction must be seen as a serious challenge for relationship marketing, with empirical studies reporting dissatisfaction rates of between 44 percent for services and 66 percent for fast moving consumer goods (Andreasen 1988).

It comes, therefore, as rather a surprise that Goodwin and Ross’ (1992, p. 150) finding that “few researchers have examined consumer evaluation of complaint-handling” still holds true almost a decade later. This deficiency becomes obvious when we consider that there is not even a consensus on the terminology used in describing the phenomenon; Gilly (1979, p. 99), for example, speaks of “satisfaction with the organization’s response”, Etzel and Silverman (1981, p. 130) use the term “secondary satisfaction”, and Lewis (1983, p. 88) prefers the notion “response satisfaction.” Other linguistic variants include “complainant’s satisfaction” (Kolodinsky 1992, p. 37), “satisfaction with complaint handling” (Andreasen 1988, p. 685; Tax, Brown, and Chandrashekaran 1998, p. 61), “satisfaction with complaint disposition” (Andreasen 1988, p. 687), “complaint response satisfaction” (Lewis 1983, p. 88), “post-complaint consumer satisfaction” (Goodwin and Ross 1990, p. 41), and “complaint handling satisfaction” (Tax, Brown, and Chandrashekaran 1998, p. 64).

More importantly, a profound understanding of the structure and dimensionality of the complaint-satisfaction construct has yet to be developed. A very limited number of authors
have investigated the conceptual structure of the construct, and only the proposal made by Stauss (1999) is based on empirical data. The identification of the key dimensions of complaint satisfaction and their relationships with outcome variables can be considered a basic prerequisite if customer complaints are to be handled effectively and thus long-term relationships with service customers maintained; clearly more research is needed in this area.

The purpose of this paper is to review the existing literature on complaint satisfaction and use this to develop alternative conceptualizations of the construct. These alternative conceptualizations are then tested empirically using confirmatory factor analysis and structural equation modeling with data generated from a survey of some 2,000 complainants of a German passenger service company. Implications for handling complaints and for future research in this area are also discussed.

**THE RELEVANCE OF COMPLAINT SATISFACTION FOR RELATIONSHIP MARKETING**

The relevance of the customer’s satisfaction with the company’s handling of his or her complaint is based on the assumption that the complainant’s evaluation of the company’s reaction has a positive influence on key relationship marketing constructs. Most importantly, complaint satisfaction is supposed to be positively related to both encounter-specific and overall customer satisfaction, customer retention, and word of mouth.

According to the disconfirmation paradigm, *customer satisfaction* is understood as the customer’s reaction to the perceived difference between performance appraisal and expectations. Generally speaking, disconfirmed expectations cause the customer to approach a state of dissatisfaction, while the confirmation of expectations leads to satisfaction (see, for example, Rust, Zahorik, and Keiningham 1996). Customer satisfaction is referred to in the literature in relation to a single service encounter as well as in a more “global” overall
customer satisfaction sense (Bitner and Hubbert 1994). The customer’s satisfaction with the service provider’s handling of the complaint can be expected to have a positive influence on both the short-term, emotionally-dominated and encounter-related customer satisfaction construct, and on more stable and cognitive overall satisfaction (Smith and Bolton 1998).

With regard to encounter-specific satisfaction, the service provider might remedy the original shortcomings so that the original reasons for dissatisfaction no longer exist. As encounter-specific satisfaction contributes to the customer’s overall satisfactory state, this remedial action might also influence overall satisfaction. In addition, if a company proves to be customer-oriented and caring during the complaint handling process, the customer’s ‘overall picture’ of this firm might also change for the positive. The following hypothesis can therefore be proposed:

**H1: Complaint satisfaction leads to both encounter-related and overall customer satisfaction with the service (positive relationship).**

*Customer retention* aims to generate (through marketing activities) repeat purchase behavior. The importance of customer retention becomes obvious when considering Sheth’s (1996, p. 2) definition of relationship marketing as, “the retention of profitable customers through ongoing one-to-one collaborative and partnering activities.” Retention is closely related to the concept of customer/brand loyalty. Today’s definition of customer/brand loyalty is usually one which includes both behavioral and attitudinal components, a definition which has evolved and differentiated itself from the early approaches based solely on behavior (Day 1969; Jacoby and Kyner 1973). Complaint satisfaction is postulated to have both a direct and indirect influence on retention, the latter through its impact on overall customer satisfaction

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1 This understanding of overall satisfaction is closely related to some interpretations of the service quality construct found in the literature (Boulding et al. 1993).
(Andreassen 1999). As indicated above, the way the firm deals with the customer’s request might influence more than just the functional dimension of the relationship between customer and company, including such things as trust, commitment and social dimensions (Morgan and Hunt 1994; Price and Arnould 1999). Two hypotheses can therefore be postulated:

**H2a:** Complaint satisfaction leads directly to overall customer retention (positive relationship).

**H2b:** Complaint satisfaction leads indirectly to overall customer retention (i.e. mediated by overall customer satisfaction) (positive relationship).

Word of mouth is often defined as all informal communications between a customer and others regarding evaluations of goods or services (see, for example, Anderson 1998; Singh 1988). Word of mouth can be positive or negative; positive word of mouth includes “relating pleasant, vivid, or novel experiences; recommendations to others; and even conspicuous display” (Anderson 1998, p. 6), while negative word of mouth includes negative communication, such as complaining or advising other customers not to use a specific provider (see, for example, Richins 1984). The impact of complaint satisfaction on customer word of mouth is predominantly reported to be significant, but nonlinear (Lewis 1983). The proposal made in this paper is that a kind of u-shape function exists, i.e. customer word of mouth activity is high when complaint satisfaction is either extremely high or extremely low, but word of mouth activity is less when the level of complaint satisfaction is between the two extremes; this approach is supported by the results obtained by Anderson (1998) on the impact of customer satisfaction on word of mouth. To be more precise, according to the findings of Arndt (1967) and others, the complainant’s word of mouth activity is expected to be most intense when he or she perceives the firm’s reaction as unsatisfactory.

Accordingly, three hypotheses can be formulated:

**H3a:** Complaint satisfaction influences the complainant’s word of mouth activities.
H3b: The complainant’s word of mouth activity is more intensive when s/he is either very satisfied or very unsatisfied with the handling of his/her complaint than when his/her satisfaction is somewhere between the two.

H3c: The complainant’s word of mouth activity is most intensive when s/he is very unsatisfied with the way the firm is handling his/her complaint.

ON THE NATURE OF COMPLAINT SATISFACTION: A COMPARISON OF EXISTING CONCEPTUALIZATIONS

Although several authors have stressed the importance of complaint satisfaction for long-term relationship marketing success, only a very limited number of researchers have analyzed the factors underlying the complaint satisfaction construct; i.e. the construct’s dimensionality. In addition, only some of this work is empirical in nature. However, the conceptualization of a complex construct like complaint satisfaction would be useful, if not indispensable, when searching for ways to effectively manage a relationship between customer and service provider. Precise knowledge about the key elements or attributes of complaint satisfaction, their interrelations and their respective relevance for the customer’s state of satisfaction may provide valuable insights for the successful management of customer complaints. Three alternative conceptualizations of complaint satisfaction are thus presented, based on a review of literature. These alternative conceptualizations provide the foundation for the empirical analysis presented later in the paper.

Tax, Brown, and Chandrashekaran (1998) use justice theory to distinguish distributive justice, procedural justice, and interactional justice as three dimensions of justice, which they interpret as antecedents of a customer’s satisfaction with the handling of a complaint. Using these distinctions and the operationalization of the three dimensions by Tax, Brown, and Chandrashekaran (1998), a three-dimensional understanding of the complaint satisfaction
A second conceptualization of complaint satisfaction views complaint handling as a specific kind of service. Donabedian (1980) proposed that *structures, processes, and outcomes* make up the central elements of services. These elements can be drawn on to distinguish between the following three dimensions of a customer’s complaint satisfaction (Hennig-Thurau 1999):^[2] (a) satisfaction with the *complaint handling structures* of the firm. Structures relevant for complaint satisfaction include the accessibility of the service firm and

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[^2]: As in the case of Tax et al., Hennig-Thurau (1999) originally interpreted the three dimensions listed here as “determinants”, rather than “dimensions”, of complaint satisfaction.
the perceived difficulty of articulating the complaint; (b) satisfaction with complaint handling processes. The process dimension includes the employees’ friendliness, the degree of customization when interacting with the complainant, and the period of time the provider needs for the response; (c) satisfaction with the outcomes of the complaint handling procedure (similar to the ‘distributive’ dimension of the first proposed conceptualization). The following hypotheses can be defined:

**H4b1:** Satisfaction with complaint handling structures, satisfaction with complaint handling processes, and satisfaction with outcomes are distinct dimensions of overall complaint satisfaction.

**H4b2:** Satisfaction with complaint handling structures, satisfaction with complaint handling processes, and satisfaction with outcomes all explain a significant amount of overall complaint satisfaction.

A third alternative conceptualization was recently proposed by Stauss (1999), who first tested a theory-based two-dimensional conceptualization of complaint satisfaction. This was a reduced version of the structure-process-outcome model, with ‘process complaint satisfaction’ and ‘result complaint satisfaction’ as the two dimensions (i.e. no structure dimension). However, empirical testing of this theoretical conceptualization using exploratory factor analysis led to its rejection and the development of a new two-factor structure of complaint satisfaction. In this new conceptualization, Stauss distinguishes between ‘cold fact complaint satisfaction’ and ‘warm act complaint satisfaction’ as dimensions of overall complaint satisfaction. The ‘cold fact’ dimension covers the adequacy, speed and reliability of the problem solution, while the ‘warm act’ dimension refers to the kind of personal treatment the complainant experiences, i.e. the friendliness of, and empathy shown by, the service employees. The appropriate hypotheses are:
**H4c1:** Cold fact complaint satisfaction and warm act complaint satisfaction are distinct dimensions of overall complaint satisfaction.

**H4c2:** Cold fact complaint satisfaction and warm act complaint satisfaction both explain a significant amount of overall complaint satisfaction.

The next section describes empirical testing of the three alternative conceptualizations of complaint satisfaction, and the relationships between complaint satisfaction and overall customer satisfaction and customer retention.

**COMPARING THE ALTERNATIVE CONCEPTUALIZATIONS AND TESTING THE RELEVANCE OF COMPLAINT SATISFACTION FOR RELATIONSHIP MARKETING: AN EMPIRICAL STUDY**

**Method**

To test the formulated hypotheses empirically, questionnaires were sent to 3,000 customers of a German national passenger service provider. The customers were selected using a random cluster sampling procedure. Each of the customers contacted had addressed a complaint to that specific company during the previous 12 months. Of the 3,000 questionnaires sent out, 2,069 questionnaires were returned and 2,016 of these were suitable for analysis. This represents a (quiet remarkable) return rate of 67 percent.³

Due to space restrictions in the questionnaire, only a limited number of items could be included for the respective constructs. Seven items were used to measure the different facets of complaint satisfaction; overall complaint satisfaction, overall customer satisfaction, overall customer satisfaction,

³ The questionnaires were sent from the Department of Marketing, who also paid for the return postage. Those complainants who returned their questionnaires were entered into a prize draw.
customer retention, and word of mouth were each measured through a single indicator (see Appendix for details). Five-point rating scales were used to measure overall customer satisfaction and all complaint satisfaction items except one (speed of complaint handling, which was measured in weeks). Retention was measured using a four-point rating scale covering the customer’s real post-complaint behavior (i.e. not buying intentions or attitudinal loyalty). For word of mouth, complainants were asked to indicate the number of people they talked to about their complaint and the company’s reaction to it.

Hypotheses were tested using Jöreskog and Sörbom’s (1993) LISREL 8.12 program, while covariance matrices were generated using PRELIS. The maximum likelihood algorithm, which has been proven to be the most reliable estimator for large sample sizes, was used for parameter estimation. Table 1 lists Cronbach’s alphas, number of indicators, and correlations between the constructs.4

Results

Confirmatory Factor Analysis of Alternative Conceptualizations

In a first step, a confirmatory factor analysis was carried out for each of the three alternative conceptualization models. The results are presented in Table 2. Looking at the global fit and specifically the absolute fit indices, it can be seen that this absolute fit is satisfactory for all three models, and best in the case of the ‘warm-cold’ model. In relative terms, the absolute fit is least optimal for the ‘services’ model, with an AGFI of 0.85.

4 Means and standard deviations are not listed, as the integration of different scale formats required the standardization of the variables. As a consequence, means were 0 and standard deviations were 1 for all items considered in this study.
However, if attention is turned toward the parsimonious fit, which is seen by some researchers as the most critical when comparing alternative non-nested models (see, for example, Kelloway 1998, p. 32), the ‘justice’ model and the ‘services’ model clearly do better than the ‘warm-cold’ model, which has by far the weakest parsimonious fit of all three models.

The results are mixed when the local fit of the three alternative conceptualizations of complaint satisfaction are compared. In all three cases, at least one factor fails to meet the 0.5 mark of average variance extracted (AVE). In the ‘justice’ model, the AVE for the procedural dimension is only 0.34, but all three indicators of the dimension have a coefficient of determination (COD) of 0.2 or higher. In the case of the ‘services’ model, the process dimension has an AVE of 0.45, but one of five indicators (speed of response) has a COD as low as 0.07, and the COD of another indicator is only 0.15. Therefore, this dimension must be seen as having limited homogeneity. Finally, in the ‘warm-cold’ model, the homogeneity of the cold fact dimension is largely unsatisfactory; the COD of one of the three constitutive items is far below the acceptable level.

If the conceptualization of a marketing construct is to be convincing, then there must be discriminant validity between the postulated dimensions. Fornell and Larcker (1981) have argued that for discriminant validity to exist, the explained variance of either of two factors must be higher than the shared variance of these two factors. Based on this criterion, discriminant validity exists for all pairs of dimensions in the ‘justice’ model and the ‘services’ model. However, in the ‘warm-cold’ model, the shared variance of the two dimensions (0.491) is higher than the average variance extracted of the cold satisfaction factor (0.418). Therefore, the assumption of a two-dimensional structure has to be rejected for this model, at least for the data used in this analysis.

The results of the confirmatory factor analysis are such that hypotheses 4a1 and 4b1 can be accepted. Hypothesis 4c1, however, which postulates a two-factor structure with warm
act satisfaction and cold fact satisfaction as distinct dimensions, must be rejected. Consequently, the latter model is excluded from further analysis.

Alternative Conceptualizations of Complaint Satisfaction and Key Relationship Marketing Constructs

For the ‘justice’ model and the ‘services’ model, the relationships between the respective dimensions of complaint satisfaction and key relational constructs (overall customer satisfaction, customer retention, and word of mouth) were tested using structural equation modeling. Figure 1 gives the two structural models, and these cover most of the hypotheses developed earlier in this paper. Word of mouth was not included in the model but tested separately, due to the proposed non-linearity of the relationships between complaint satisfaction and word of mouth; the structural equation modeling technique is restricted to linear relations. In addition, as the research design was cross-sectional, only the more stable overall customer satisfaction construct was considered in the study.

The results prove that both the ‘justice’ model and the ‘services’ model are expressive conceptualizations of complaint satisfaction (see Table 3 for detailed results). In both cases, over 74 percent of the overall measure of complaint satisfaction is explained by the respective dimensions (‘justice’ model = 0.742; ‘services’ model = 0.744). The global goodness of fit is also good for both models, though the ‘justice’ model performs slightly better in terms of absolute measures of model fit.
In the ‘justice’ model, the interaction-related dimension explains most of the overall complaint satisfaction, and is followed in terms of relevance by the distribution-related dimension. The path from the procedural dimension to overall complaint satisfaction is also significant but, with a coefficient of 0.07, is clearly a weaker contributor than the other two dimensions. In the ‘services’ model, the complaint handling process plays the key role in complaint satisfaction, even exceeding the outcome dimension of complaint handling. Interestingly, the structure of complaint handling has no significant impact on a customer’s complaint satisfaction.

The results also give strong support to the importance of complaint satisfaction in relationship marketing. In both models, overall complaint satisfaction explains almost 40 percent of overall customer satisfaction. In addition, the direct path from overall complaint satisfaction to customer retention is significant, and is accompanied by an even stronger indirect effect moderated by overall customer satisfaction (0.627 * 0.381 = 0.239).

The relationships between complaint satisfaction and customer word of mouth were also tested. As can be seen in Figure 2, the intensity of word of mouth is highest when the customer is very dissatisfied with the way the company handles his or her complaint. This confirms hypothesis 3a. However, word of mouth intensity does not increase when complaint satisfaction is high, but is actually lowest at this point. Customers tell almost three times as many people about their experiences when extremely dissatisfied with the handling of their complaint as when they feel highly satisfied. This leads to the rejection of hypothesis 3b and the acceptance of hypothesis 3c.
DISCUSSION

The results of this study underline impressively the relevance for relationship marketing success of customer-oriented handling of customer complaints. Complaint satisfaction is shown to strongly influence the customer’s degree of overall satisfaction with the service provider’s offerings. Two of the three alternative conceptualizations of complaint satisfaction empirically tested in this paper are able to provide a company with information on how to manage customer complaints more effectively. While the first model is based on justice theory and distinguishes between distributional, procedural, and interactional aspects of the complaint handling procedure, the second model draws on the differentiation between structures, processes, and outcomes often attributed to the early work of Donabedian in the services literature.

Process Orientation vs. Outcome Orientation

A central insight from the study is that the way companies react to customers’ requests is decisive for the customers’ evaluation of complaint handling. The results show that the question of ‘how to behave’ during the process of handling a complaint deserves even more attention (with respect to influencing complaint satisfaction) than the question of what should be offered to the individual customer to compensate his/her loss (see Stauss 1999 for a similar finding). As the ‘justice’ model of complaint satisfaction demonstrates, the interactional style of complaint handling is more important than formal aspects such as speed of reaction or the laboriousness of the process.

The results for the ‘services’ model of complaint satisfaction indicate that structural aspects of complaint management (e.g. accessibility) play a minor part in the formation of complaint satisfaction (i.e. no structural aspects were found to have a significant impact on
overall complaint satisfaction). This can be interpreted in two ways. First, the formation of complaint satisfaction can be interpreted as a dynamic process that varies over time. Consequently, the evaluation of the firm’s complaint handling structure (which is generally most relevant when initiating a complaint), becomes less relevant in later stages of the process, as other attributes of complaint handling become more important. Second, those complainants who are very dissatisfied with the structural aspects of a complaint management system might not pursue the articulation of their initial dissatisfaction with the firm, but simply switch to a competitor, and are therefore not adequately considered in this study.

**Limitations of this study**

Although the analysis provides important information for complaint management practice and theory, it has some inherent limitations which need to be taken into account when interpreting the results. As all calculations were based on complaints addressed to one single service provider, specific characteristics might exist that limit the transfer of the results to other service areas. Furthermore, as the study was carried out in Germany, cultural and other kinds of influences might lead to different results when similar studies are executed in other countries, such as the United States. Finally, the operationalization of the constructs considered in this study needs to be built on a broader basis (i.e. multi-item scales instead of single-item scales for some constructs). Future studies in the area of complaint satisfaction, especially those which address the above points, might help to deepen our understanding of the conceptual structure and the consequences of customers’ satisfaction with service providers’ complaint handling performances.

**REFERENCES**


Donabedian, Avedis (1980), The Definition of Quality and Approaches to its Assessment and Monitoring, 1, Ann Arbor: Health Administration Press.


**APPENDIX**

The following is a list of indicators used in the analysis (translation from the original German).

*Complaint satisfaction*

<table>
<thead>
<tr>
<th>Please indicate your satisfaction with</th>
<th>“justice” model</th>
<th>“services” model</th>
<th>“warm-cold” model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>Category</td>
<td>Structure</td>
<td>Outcome</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>- the difficulty of making the complaint</td>
<td>Procedural</td>
<td>Structure</td>
<td>-</td>
</tr>
<tr>
<td>- what you get from the service provider in the end</td>
<td>Distributional</td>
<td>Outcome</td>
<td>Cold</td>
</tr>
<tr>
<td>- the friendliness of the response</td>
<td>Interactional</td>
<td>Process</td>
<td>Warm</td>
</tr>
<tr>
<td>- the degree to which the treatment you received was individual and personal</td>
<td>Interactional</td>
<td>Process</td>
<td>-</td>
</tr>
<tr>
<td>- the amount and quantity of information the service provider gave you</td>
<td>Interactional</td>
<td>Process</td>
<td>Cold</td>
</tr>
<tr>
<td>How long did it take to receive a response? (in weeks)</td>
<td>Procedural</td>
<td>Process</td>
<td>-</td>
</tr>
<tr>
<td>Altogether, how satisfied are you with the way the service provider handled your complaint? (overall complaint satisfaction)</td>
<td>Procedural</td>
<td>Process</td>
<td>Cold</td>
</tr>
</tbody>
</table>

**Overall customer satisfaction**
Today, how satisfied are you with the service provider in general?

**Customer retention**
In terms of the intensity with which you use this specific service provider, has your traveling behavior changed since the problem occurred? (I use this provider more frequently, I use this provider to the same extent, I use this provider less frequently, I no longer use this provider)

**Word of mouth**
How many people have you told about this complaint and the service provider’s reaction to it?
## TABLE 1

Reliabilities, Number of Indicators, and Correlations

<table>
<thead>
<tr>
<th>Number of</th>
<th>Distributive cos</th>
<th>Procedural cos</th>
<th>Interac-</th>
<th>Structure cos</th>
<th>Process cos</th>
<th>Outcome cos</th>
<th>Cold fact cos</th>
<th>Warm act cos</th>
<th>Overall cos</th>
<th>Overall cus</th>
<th>Customer retention</th>
<th>Word of mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>items</td>
<td></td>
<td></td>
<td>tional cos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive cos</td>
<td>1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural cos</td>
<td>3</td>
<td>0.155</td>
<td>0.522</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction cos</td>
<td>3</td>
<td>0.461</td>
<td>0.367</td>
<td>0.805</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure cos</td>
<td>1</td>
<td>0.090</td>
<td>0.730</td>
<td>0.256</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Process cos</td>
<td>5</td>
<td>0.420</td>
<td>0.682</td>
<td>0.900</td>
<td>0.342</td>
<td>0.710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome cos</td>
<td>1</td>
<td>1.000</td>
<td>0.155</td>
<td>0.461</td>
<td>0.090</td>
<td>0.420</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold fact cos</td>
<td>3</td>
<td>0.742</td>
<td>0.515</td>
<td>0.723</td>
<td>0.226</td>
<td>0.801</td>
<td>0.742</td>
<td>0.488</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Warm act cos</td>
<td>1</td>
<td>0.348</td>
<td>0.352</td>
<td>0.824</td>
<td>0.247</td>
<td>0.764</td>
<td>0.348</td>
<td>0.504</td>
<td>1.00</td>
<td></td>
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<td></td>
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<tr>
<td>Overall cos</td>
<td>1</td>
<td>0.654</td>
<td>0.295</td>
<td>0.664</td>
<td>0.206</td>
<td>0.619</td>
<td>0.654</td>
<td>0.654</td>
<td>0.556</td>
<td>1.00</td>
<td></td>
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<tr>
<td>Overall cus</td>
<td>1</td>
<td>0.444</td>
<td>0.231</td>
<td>0.453</td>
<td>0.204</td>
<td>0.421</td>
<td>0.444</td>
<td>0.444</td>
<td>0.368</td>
<td>0.572</td>
<td>1.00</td>
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</tr>
<tr>
<td>Customer retention</td>
<td>1</td>
<td>0.248</td>
<td>0.129</td>
<td>0.257</td>
<td>0.092</td>
<td>0.242</td>
<td>0.248</td>
<td>0.256</td>
<td>0.206</td>
<td>0.286</td>
<td>0.376</td>
<td>1.00</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>1</td>
<td>-0.091</td>
<td>-0.153</td>
<td>-0.159</td>
<td>-0.088</td>
<td>-0.199</td>
<td>-0.091</td>
<td>-0.171</td>
<td>-0.121</td>
<td>-0.178</td>
<td>-0.197</td>
<td>0.141</td>
</tr>
</tbody>
</table>

Cos = complaint satisfaction; cus = Customer Satisfaction
FIGURE 1

Two Alternative Structural Models of the Consequences of Complaint Satisfaction

“Justice” Model

Distributive Satisfaction

H4a2(1)

Interactional Satisfaction

H4a2(2)

Procedural Satisfaction

H4a2(3)

Overall Complaint Satisfaction

H1

Overall Customer Satisfaction

H2a

Customer retention

H2b

“Services” Model

Satisfaction with structure

H4b2(1)

Satisfaction with processes

H4b2(2)

Satisfaction with outcome

H4b2(3)

Overall Complaint Satisfaction

H1

Overall Customer Satisfaction

H2a

Customer retention

H2b
FIGURE 2
Relation Between Complaint Satisfaction and Word of Mouth Intensity

TABLE 2
Global and Local Goodness of Fit Indices for Three Alternative Conceptualizations of Complaint Satisfaction

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Distributive</th>
<th>Procedural</th>
<th>Interational</th>
<th>Structure</th>
<th>Process</th>
<th>Outcome</th>
<th>Cold</th>
<th>Warm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model I (“justice model”)</td>
<td>GFI</td>
<td>0.979</td>
<td>0.930</td>
<td>0.995</td>
<td>AGFI</td>
<td>0.951</td>
<td>0.850</td>
<td>0.977</td>
</tr>
<tr>
<td>Model II (“services model”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model III (“warm-cold model”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AVE\textsuperscript{a} | 1.00* | 0.335 | 0.680 | 1.00* | 0.451 | 1.00* | 0.418 | 1.00* |
COD\textsuperscript{b} | 0.326; 0.196; 0.482 | 0.580; 0.729; 0.730 | 0.588; 0.720; 0.722; 0.072; 0.152 | 0.401; 0.789; 0.064 |

Discriminant validity | Given for all combinations of dimensions | Given for all combinations of dimensions | No discriminant validity |

\textsuperscript{a} average variance extracted; \textsuperscript{b} coefficients of determination; * fixed parameter
### TABLE 2

Results of Structural Equation Modeling

<table>
<thead>
<tr>
<th>Path Hypothesis</th>
<th>Path coefficient</th>
<th>Path Hypothesis</th>
<th>Path coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributive satisfaction → overall complaint satisfaction</td>
<td>H4a2 (1) 0.415</td>
<td>Structure satisfaction → overall complaint satisfaction</td>
<td>H4b2 (1) 0.021</td>
</tr>
<tr>
<td>Procedural satisfaction → overall complaint satisfaction</td>
<td>H4a2 (2) 0.074</td>
<td>Process satisfaction → overall complaint satisfaction</td>
<td>H4b2 (2) 0.546</td>
</tr>
<tr>
<td>Interactional satisfaction → overall complaint satisfaction</td>
<td>H4a2 (3) 0.504</td>
<td>Outcome satisfaction → overall complaint satisfaction</td>
<td>H4b2 (3) 0.407</td>
</tr>
<tr>
<td>Overall complaint satisfaction → overall customer satisfaction</td>
<td>H1 0.627</td>
<td>Overall complaint satisfaction → overall customer satisfaction</td>
<td>H1 0.627</td>
</tr>
<tr>
<td>Overall complaint satisfaction → customer retention</td>
<td>H2a 0.134</td>
<td>Overall complaint satisfaction → customer retention</td>
<td>H2a 0.134</td>
</tr>
<tr>
<td>Overall customer satisfaction → customer retention</td>
<td>- 0.381</td>
<td>Overall customer satisfaction → customer retention</td>
<td>- 0.381</td>
</tr>
</tbody>
</table>

GFI = 0.969; AGFI = 0.943; RMR = 0.031; CFI = 0.967; PGFI = 0.529; PNFI = 0.624
GFI = 0.936; AGFI = 0.886; RMR = 0.057; CFI = 0.930; PGFI = 0.527; PNFI = 0.638

*Note: values printed in italics are not significant at the 0.05 level*