

# Sources of Generalized versus Issue-Specific Dis/Satisfaction in Service Channels of Distribution: A Review and Comparative Investigation

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*Service channels represent complex behavioral settings for understanding sources of dis/satisfaction between service providers and service recipients. Because of the nature of a service offering, service evaluations are frequently subjective and judgmental, making it difficult for service providers to determine precisely the sources of customer dis/satisfaction. This article empirically evaluates sources of both general and issue-specific dis/satisfactions in a health care channel setting. The effects of a series of competency-based as well as secondary predictors of dis/satisfactions are simultaneously tested for their impact on issue-specific and generalized dis/satisfaction perceptions. A meta-analytic review process is employed to isolate potential predictors of dis/satisfaction. Implications of results are discussed for both academic and practitioner communities. J BUSN RES 1998, 42:7-23. © 1998 Elsevier Science Inc.*

Service channels present a complex and unique behavioral setting for understanding the sources of dis/satisfaction between service providers and their customers. This complexity is directly traceable to the nature of the service product. Services are activities, benefits, performances, or satisfactions offered for sale that are characterized by intangibility, inseparability of production and consumption, heterogeneity or nonstandardization (due to inseparability), and perishability (Ziethaml, Parasuraman, and Berry, 1985). Con-

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sequently, the evaluations of services are often subjective, perceptual, judgmental, interpretive, and instantaneous. It is implicitly believed that these differentials pose unique managerial problems requiring distinct strategic responses. For instance, services are said to require more quality control, supplier credibility, and adaptability (Kotler, 1991, p. 433). In a similar vein, the unique characteristics of services are predicted to raise consumers' perceived risks, thereby reducing certainty associated with quality and satisfaction judgments (Dowling and Staelin, 1994; Ostrom and Iacobucci, 1995).

Ziethaml, Parasuraman, and Berry (1985, p. 43), however, while acknowledging the impressive lists of potential problems and strategic solutions discussed in the services literature, decry the obsession of the extant literature with the differences between goods marketing and services marketing. Such an orientation, they believe, has resulted in an unrealistic research agenda. For instance, only one of the eight key problem areas specified by the services literature was judged to be an actually salient issue by the respondents of their survey aimed at presidents of service firms. Consequently, for theoretical relevancy reasons, they invite researchers to focus on investigations of issues genuinely internal to services marketing. In this spirit, we herein mount a more introspective examination of the dis/satisfaction phenomenon within services channels. Specifically, we attempt to explore if dis/satisfaction judgments on services can be dichotomously classified into particularized (i.e., issue-specific) and generalized perceptions. The discovery of such a dichotomy, if extant, would have significant theoretical and managerial repercussions for understanding and managing dis/satisfactions in services channels. For instance, issue-specific dissatisfaction cues can be directly uti-

lized by managers to launch more focused corrective strategies at alleviating them. In contrast, generalized dis/satisfaction perceptions are necessarily more difficult to decipher. Clearly, the goal of managing dis/satisfaction in services channel is not controversial given the significance of services sector in modern economies. For example, service brands now account for two-thirds of the U.S. GDP (Berry, 1995), and 90% of new jobs created in the U.S. economy are services related (Ziethaml, Parasuraman, and Berry, 1990).

## Dichotomy of Issue-Specific versus Generalized Perceptions

The premise of conceptualizing dis/satisfaction within services channels dichotomously into issue-specific versus generalized dis/satisfactions can be supported by several arguments. Social exchange theory and its extensions (cf. Thibaut and Kelley, 1959; Anderson and Narus, 1984; Dant and Monroe, 1987) suggest that individuals evaluate event outcomes by invoking certain referent structures (comparison level or CL in the terminology of exchange theory), which are themselves formulated by direct and/or vicarious experiential learning. When the event outcomes are superior to the invoked yardsticks representing expectations, a positive effect or positive incongruity occurs, leading to favorable evaluations and satisfaction; conversely, when negative incongruity is precipitated by event outcomes inferior to evoked CL, dissatisfaction is expected to be the residual sentiment. Dant and Monroe (1987 p. 332, italics in the original) have argued that “when evaluating a particular issue-outcome, it is likely that channel members would invoke a criterion based on past experiences over *similar kinds of issues*. . . . This CL used for assessing a single outcome would then be a subset of the CL used for evaluating overall relationships.” In other words, issue-specific versus generalized dis/satisfaction perceptions are distinguished because they entail different cognitive processing (i.e., the two judgments are based on references to different yardsticks or evaluative criteria). Dant (1985, 1986) has reported on the empirical verification of the separate processing of issue-specific and generalized evaluations as envisioned by social exchange theory and its extensions.

An alternative interpretation of such a dichotomy can be derived from determinant attribute theory (Alpert, 1971; Myers and Alpert, 1968). Determinant attribute theory argues that seemingly less significant product/service attributes often end up being the decisive influences in patronage or adoption decisions because the so-called more significant product/service attributes are viewed as equivalent across alternatives by the decision makers. For instance, the choice of family physicians may actually be determined by considerations such as geographic proximity, or waiting-related characteristics because attributes such as physician competence or reliability are judged to be universally applicable to all physicians. Such a premise of disproportionate influence of certain attributes

may be especially relevant to services channels because the innate intangibility of services makes credible claims of core, substantive attributes impossible to guarantee. Therefore, regardless of the generalized levels of dis/satisfaction with a service offering, identifying key issue-specific dis/satisfactions becomes critical for predicting choice behavior. In this vein, Ziethaml, Parasuraman, and Berry (1985) strongly argue for the discovery of such key, issue-specific problem areas associated with services channels. Finally, the information processing perspective in terms of Fazio’s accessibility model (cf., Fazio, 1986; Fazio and Williams, 1986) would suggest that service–quality associations in memory for services are likely to be more diffused and scattered, rendering generalized dis/satisfaction judgments less certainly anchored. In other words, only issue-specific dis/satisfactions may be well defined in the memory for services.

In sum, regardless of the theoretical framework adopted, there appears to be ample justification for differentiating between issue-specific and generalized dis/satisfaction perceptions within services channels. Importantly, the dichotomy premise does not conceive of the issue-specific perceptions as mere constituents of the generalized perceptions linked together by some additive, multiplicative, or other functional relationship. Complex theoretical linkages are proposed for the two categories of perceptions. According to Dant and Monroe (1987 pp. 333–334), a series of issue-specific dis/satisfactions would lead to generalized dis/satisfactions only if mediating sentiments like destroyed expectations of balanced exchange emerge; even so, threshold effects are hypothesized. Determinant attribute theory and the memory literature would suggest that issue-specific dis/satisfactions are substantively and managerially more important than their generalized counterparts, a view even Ziethaml, Parasuraman, and Berry (1985) implicitly subscribe to in their call for isolating key problem areas in services channels. It is also noteworthy that the dichotomy premise shifts the theoretical focus away from generalized perceptions, and posits issue-specific perceptions as deserving attention in their own right. As mentioned before, issue-specific dissatisfactions are pragmatically and substantively also more significant because they lend themselves to focused remedial managerial actions. Our investigation, then, seeks to test the dichotomy premise by simultaneously evaluating the sources of generalized and issue-specific customer dis/satisfaction within a services channel context.

## Research Setting

We selected the health care service channel as the research setting for our empirical work. This choice was motivated by several reasons. Foremost, health care channels appeared appropriate given their complexity, obvious customer involvement in the service, and the considerable variability one encounters in services provided, service providers, delivery formats, as well as customer categories. Further, given the strong

contemporary national interest in developing more efficient and effective health care channels, we hoped our findings could contribute to the public policy dialogue. Second, health care channel has been one of the most frequently utilized settings for services research (cf., Ziethaml, Parasuraman, and Berry, 1985). Consequently, we benefitted from its rich literature stream for insights in designing our own study. For example, as we discuss later, we were able to isolate a long list of predictors of dis/satisfaction within the health care channel setting using a meta-analytic review process, and subsequently incorporate them in an inclusive manner within our own empirical work. Finally, the health care setting provided us with a well articulated source of issue-specific customer dis/satisfaction to work with, namely, the issue of waiting dis/satisfaction. As can be seen in the next section, waiting dis/satisfaction research also has a rich tradition within the health care area. This construct choice appeared particularly appropriate also because: (1) waiting is a persistent and pervasive problem within services channels; (2) waiting is usually not related to the technical competency aspects of services, as such it allows one to contrast the effects of a secondary factor with other primary sources of customer dis/satisfaction in the spirit of determinant attribute theory; and (3) waiting has recently been attracting considerable research attention as a critical target for efficiency initiatives (Chebat, et al., 1995; Taylor, 1994, 1995; Taylor and Claxton, 1994; Bitner, Booms, and Tetreault, 1990). Our study, therefore, simultaneously examines the generalized and waiting dis/satisfaction effects within the health care services channel context.

## Generalized versus Waiting Dis/Satisfaction in Health Care

Service encounters generally proceed through six phases regardless of the type of service: access, check-in, diagnosis, service delivery, check-out, and follow-up (Bitran and Lojo, 1993); and waiting can potentially occur in all phases. Within the health care channel, patient willingness to seek medical care, comply with prescribed treatment, and maintain a continuing relationship with a medical practitioner is directly related to the satisfaction with the health care service (Alpert et al., 1970; Dershewitz and Paichel, 1986; Greertsen, Gray, and Ward, 1973; Liptak et al., 1985; Young et al., 1985), and waiting time has been recognized as one of the most important sources of patient dissatisfaction (Dans, Johnson and King, 1989; Kasper and Berk, 1981; McMillan, Younger, and DeWine, 1986; Piper, 1989; Smith et al., 1989; Weissberg et al., 1986; Taylor and Claxton, 1994). Some even consider waiting time to be more significant than service quality in determining satisfaction (Roslow, Nicholls, and Tsalikis, 1992; Crane, 1991).

However, other investigations have failed to find a relationship between waiting and general dis/satisfaction with medical care (Foster and Louria, 1979). That is, patients have been

known to express satisfaction irrespective of the duration of the wait. This apparent contradiction may be partly explained by the finding that, in general, explanations of the delay can mitigate dissatisfaction (Bitner, Booms, and Tetreault, 1990) or, specifically, patients' dissatisfaction with waiting time may be neutralized if the attending physician treats them with warmth and concern (Ben-Sira, 1974; King and Goldman, 1975; McDaniel, 1979). More generally, waiting time dissatisfaction may also be mitigated if customers view the wait as appropriate (Kasper and Berk, 1981). Consistent with exchange theory, Taylor (1994) suggests that if delays are common and expected, the wait does not increase the anger and dissatisfaction. On the other hand, people who enter a service encounter angry or in a negative mood tend to transfer that attitude to the overall encounter (Minden, 1994; Chebat et al., 1995). Hence, Bitran and Lojo (1993, p. 339) note: "it is much easier to keep a customer happy from the very beginning than to regain his favor once it is lost. For this reason, effective management of waiting time is very important in every phase of the service encounter."

Theoretically, the customers' interpretations of the waits encountered and inferences about their appropriateness may be related to the perceived differentials between expected and actual waits (disconfirmation) (Davis and Vollmann, 1990; Gilbert, Lumpkin, and Dant, 1992; Hunt, 1991), or negative incongruity in social exchange theoretic terminology (Dant and Monroe, 1987; Dant, 1986). Research on service quality suggests that expectations offset perceptions of quality, satisfaction and, consequently, intended behavior (Boulding, Kalra, Staelin, and Zeithaml, 1993; Cronin and Taylor, 1992; Teas, 1993; Bolton and Drew, 1991, 1993). Hence, customers expecting to wait due to early arrival or lack of appointments may not encounter disconfirmations, and the resultant dis/satisfactions (Kasper and Berk, 1981; Taylor, 1994). Indeed, it is the perception of the waiting time that influences the service quality evaluation (Katz, Larson, and Larson, 1991).

Broadly, definitive answers are difficult to derive from the literature on this issue because of three complications. First, it is well recognized that waiting dis/satisfaction is but one contributing component of general dis/satisfaction, which is likely based on multiple considerations (Ben-Sira, 1974; Chapko et al., 1985; King and Goldman, 1975; McDaniel, 1979; Mangold et al., 1986; Young et al., 1985) (Table 1). However, the precise relationship between waiting and general dis/satisfaction has not been verified (beyond intuitive plausibility) because no empirical investigations have simultaneously studied both types of dis/satisfactions. Second, even though waiting times vary considerably across the different health care delivery channel formats (e.g., private physicians, walk-in clinics, emergency rooms) (Dant, Lumpkin, and Bush, 1990; Kasper and Berk, 1981), no study has explored the issues of waiting and general dis/satisfactions across alternate channel formats in a comparative mode. Hence, it is not known if dis/satisfaction levels vary across alternative channel

**Table 1.** Meta-Analytic Summary of Empirical Literature

Study	Delivery Mode <sup>b</sup>	Satisfaction Type <sup>a</sup>	Factors Influencing Generalized versus Issue-Specific (Waiting) Dis/Satisfaction <sup>a</sup>										
			Physician Friendliness	Technical Competence	Office Waiting Time	Examining Room Time	Reasonableness of Wait	Health Information Given	Staff Friendliness	Accessi-bility	Appoint-ment Availability	Afford-ability	
Dans et al., 1989 n = 1,099	C	G	+r = NC p = NC		-r = NC p = NC	-r = NC p = NC							
Piper, 1989 n = 505	H	W		+r = .173 p < .001	-r = .170 p < .001								
Smith et al., 1989 n = 150	P	G			-r = .571 p < .001			+r = .549 p < .01	+r = .483 p < .004				
Bredfeldt et al., 1987 n = 132	P	W	+r = 0.84 p = .831		-r = .316 p < .001	-r = .316 p < .001							
Chesteen et al., 1986 n = 2,339	C	G	+r = .283 p < .01		-r = .283 p < .01	-r = .175 p < .051				*	+r = .283 p < .01	+r = .280 p < .01	
Dershwitz and Paichel, 1986 n = 296	C	G			-r = .048 p < .206				+r = .224 p < .001				
Feletti et al., 1986 n = 503	P	G	+r = .224 p < .001	+r = .207 p < .001				+r = .489 p < .001					
McMillan et al., 1986 n = 368	C	G	+r = NC p = NC	+r = NC p = NC	-r = NC p = NC				+r = NC p = NC				+r = NC p = NC
Mangold et al., 1986 n = 679	P	G	+r = .152 p < .001	+r = .157 p < .001	-r = .151 p < .001						+r = .152 p < .001	+r = .154 p < .001	+r = .153 p < .001
Weissberg et al., 1986 n = 44	C	G			-r = .265 p = .036				+r = .774 p < .001				
Chapko et al., 1985 n = 82	P	G	+r = .245 p = .046	+r = .173 p < .10	-r = .548 p < .001	-r = .436 p < .003			+r = .020 p > .50	+r = .359 p < .001	+r = .209 p = .047	+r = .189 p = .048	
Dutton et al., 1985 n = 700	P,H,C	G	+r = .265 p < .01	+r = .339 p = .048	-r = .378 p = .048								
Flynn, 1985 n = 51	C	G			-r = .458 p < .001								+r = .241 p = .047
Liptak et al., 1985 n = 120	C	W			-r = .462 p < .001								
Young et al., 1985 n = 87	P	G	+r = .407 p < .001		-r = .021 p < .50			+r = .407 p < .001	+r = .248 p < .01		+r = 1.76 p < .05	+r = .170 p = .058	
Gillette et al., 1982 n = 309	C	G	+r = .141 p < .01	+r = .143 p < .01		-r = .173 p < .001		+r = .095 p < .05					
Kasper and Berk, 1981 n = 12,320	WC,P,H,C	W			-r = .032 p < .001						+r = .032 p < .001		
McDaniel, 1979 n = 150	C	G	+r = .032 p < .50	+r = .265 p < .001	-r = .089 p = .141			+r = .301 p < .001	+r = .102 p = .086	+r = .304 p < .001			

Stiles et al., 1979 n = 50	C	G	+r = .519 p < .001				+r = .523 p < .001					
Liao et al., 1978 n = 132	P,H,C	G	+r = NC p = NC	-r = NC p = NC			-r = NC p = NC	+r = .316 p < .001	+r = .055 p = .273	+r = .224 p < .005		
Spendlove et al., 1978 n = 87	C	W			-r = .106 p = .370	+r = .566 p < .01		+r = .032 p > .50				
Needle and Murray, 1977 n = 328	P,C	G	+r = NC p = NC	+r = NC p = NC			+r = NC p = NC					
Berkanovic and Marcus, 1976 n = 451	C	G	+r = .539 p < .001		-r = .447 p < .001		+r = .721 p < .001	+r = .531 p < .001		+r = .616 p < .001		
Sloan and Lorant, 1976, 1977 n = 4,500	P	G			-r = .265 p < .001							
King and Goldman, 1975 n = 445	C	G	+r = .173 p < .001	+r = .174 p < .001	-r = .176 p < .001		+r = .174 p < .001					
Ben-Sira, 1974 n = 1,892	P,C	G	+r = .831 p < .001	+r = .806 p < .001	-r = .374 p < .001			+r = .346 p < .001				
Comstock and Slome, 1973 n = 1,260	C	G			-r = .003 p < .01							
Korsch et al., 1968 n = 800	WC	G	+r = .141 p < .001				+r = .143 p < .001					
Davis, 1968 n = 154	C	G					+r = .140 p < .05					
Friedson, 1963 n = 250	H	G	+r = NC p = NC	+r = NC p = NC			+r = NC p = NC					
Samora et al., 1962 n = 584	H,C	G					+r = NC p = NC					
Total Number of Effects			19	13	22	5	1	14	10	5	7	6
Modal Direction of Effects			+	+	-	-	+	+	+	+	+	+
Mean Effect Size			.288	.271	.259	.275	.566	.354	.307	.283	.217	.195

<sup>a</sup>The + preceding the correlation coefficient, *r*, denotes a positive effect, while - indicates a negative effect. NC signifies that correlation coefficients could not be computed even after using conversion formulae based on the information reported in the study.

<sup>b</sup>Delivery modes are coded as: C=clinic, H=hospital, P=private physician, and WC=walk-in clinic. When multiple channels were studied, effects have been averaged.

<sup>c</sup>Dis/Satisfaction types are coded as: G=generalized dis/satisfaction, and W=issue-specific (waiting) dis/satisfaction.

formats or not. And finally, no study has simultaneously investigated all the identified predictors of waiting and general dis/satisfactions within a single study. Consequently, the relative significance of the various supposed predictors of waiting and general dis/satisfactions is not known.

In sum, straightforward investigations of dis/satisfactions within health care services channels that do not address the above three confounds are not likely to be theoretically informative. In our study, we attempt to correct for these confounds by: (1) simultaneously investigating generalized and waiting dis/satisfactions (our previously stated primary research goal); (2) evaluating these effects for two very different channel formats (i.e., private physicians and walk-in clinics); and (3) comprehensively incorporating the various predictors of generalized as well as issue-specific (i.e., waiting) dis/satisfaction specified in the literature (Table 1), including four previously untested factors. We now turn to a meta-analytic review of the extant empirical literature in search of predictors of both types of dis/satisfactions.

## Empirical Literature Insights

An extensive literature search identified 31 empirical studies on the subject of waiting and general dis/satisfaction. These are summarized in Table 1. We employed meta-analytic procedures (cf., Farley and Lehmann, 1986) in deriving the effects (Cohen, 1977) reported by these studies. That is, for comparability reasons, we began by transforming various reported statistics (e.g., F-statistics, *t*-statistics, chi-squared statistics, regression coefficients) into a common metric of effect size, namely, Pearson's product moment correlation (*r*) using conversion formulae proposed by Hunter, Schmidt, and Jackson (1982), and Rosenthal (1980, 1982). Table 1 reports: (1) the computed *r* values related to each effect investigated; (2) the direction of these effects (noted by "+" or "-") and (3) the associated statistical significance (i.e., *p*-values).

Ten factors for waiting and general dis/satisfaction have been previously investigated in the literature. These factors can be categorized into: (1) waiting related factors (appointment waits, office waits, examining room waits, and reasonableness of wait); (2) physician related factors (technical competence, friendliness, and amount of information shared); and (3) off-setting/situational factors (accessibility, affordability, and friendliness of staff) (Table 1). As can be seen from Table 1, the research stream exhibits six general trends: (1) general dis/satisfaction has been studied more frequently; (2) the frequencies with which the different factors have been measured vary considerably; (3) different delivery channel formats have been investigated with varying frequencies (clinics and private physicians most frequently; hospitals and walk-in clinics least frequently); (4) the explanatory power of individual predictors varies greatly, suggesting that several factors should be studied simultaneously to gauge their relative significance, and, as previously noted, (5) general and waiting dis/satisfactions have

not been simultaneously investigated; and (6) all 10 predictors have never been simultaneously evaluated.

## Waiting Related Factors

Numerous studies point out that unreasonable waits can be problematic within the health care services channels (Acton, 1973a, 1973b; Berkanovic and Marcus, 1976; Bredfeldt, Ripani, and Cuddeback, 1987; Comstock and Slome, 1973; Dershewitz and Paichel, 1986; Flynn, 1985; Kasper and Berk, 1981; Liptak et al., 1985; Piper, 1989; Sloan and Lorant, 1976, 1977; Phelps and Newhouse, 1974; Weissberg et al., 1986). Past studies are supportive of distinguishing among different types of waits. For example, appointment waits generated less issue-specific dis/satisfaction relative to office and examining room waits. Moreover, the impact varies greatly between private physician and clinics patients. Importantly in our context, waiting appears to impact issue-specific waiting and general dis/satisfactions differently. For instance, examining room waits generated relatively lower general dissatisfaction than issue-specific waiting dissatisfaction, suggesting that other factors may have alleviated the adverse impact of issue-specific waiting dissatisfaction on general dissatisfaction. In the case of office and appointment waits, however, this trend is reversed resulting in relatively greater levels of generalized rather than issue-specific waiting dissatisfaction. Regrettably, only one empirical study (Spendlove et al., 1987) has documented the impact of reasonableness of wait on patient dis/satisfaction. They found attributions of reasonableness mitigating dissatisfaction levels, a finding consistent with social exchange and disconfirmation theories.

## Physician Related Factors

Although some studies suggest that the amount of information divulged by physicians is the most significant determinant of dis/satisfaction within the health care services channel (Berkanovic and Marcus, 1976; Davis, 1968; Gillette, Byrne, and Cranston, 1982), others posit interpersonal factors (e.g., friendliness) as the primary predictors of dis/satisfaction relative to technical competency-based predictors (Ben-Sira, 1974; Bredfeldt, Ripani, and Cuddeback, 1987; Feletti, Firman, and Sanson-Fisher, 1986; Gillette, Byrne, and Cranston, 1982; King and Goldman, 1975; Korsch, Gozzi, and Francis, 1968; Liao et al., 1978; McDaniel, 1979; Stiles et al., 1979; Szasz and Hollender, 1956). Two explanations have been advanced for this primacy of interpersonal factors: (1) the inability of customers to evaluate physicians' competencies (Needle and Murray, 1977), and (2) a general presumption on the part of the customers that technical competence of physicians is a given (Friedson, 1963). And yet, when all three physician factors are simultaneously tested, the hierarchy of effects becomes information shared, competence, and friendliness. In general, positive attributions about the physicians are expected to mitigate waiting related dis/satisfactions within the health care services channel (Bredfeldt, Ripani, and Cudde-

back, 1987; Piper, 1989); however, the effects of information dissemination on waiting dis/satisfaction remain unverified. Hence, the relative impact of the three physician factors on waiting dis/satisfaction is currently unknown. Moreover, as Table 1 documents, the magnitude of effect related to different physician attributes differs across delivery modes (i.e., different service channels). For example, sharing medical information was found to be one and one-half times more significant for private physicians than for clinics.

### Offsetting and Situational Factors

Accessibility, affordability, and friendliness of staff were dubbed offsetting/situational factors because their role in determining customer dis/satisfactions is expected to be a secondary one. Put differently, they may alleviate the impact of (say) office waits on issue-specific waiting dissatisfaction, but they are unlikely to become the primary reason for patient satisfaction and patronage. Understandably, then, these factors have been relatively infrequently investigated. Nevertheless, when investigated simultaneously with other predictors, these factors hint at important moderating influences (Acton, 1973a; Chapko et al., 1985; Liao et al., 1978; McDaniel, 1979; Phelps and Newhouse, 1974). However, the impact of these offsetting/situational factors relative to several other predictors of customer dis/satisfactions within health care services channels remains currently untested (Table 1).

### Four Additional Factors

In addition to the 10 predictors of issue-specific and generalized dis/satisfaction isolated from the literature (as discussed above), we incorporate four new predictors in our empirical investigation: (1) reputation of care provider; (2) loyalty to the care provider; (3) the availability of different specialties within the same facility; and (4) perceptions of waiting time in other similar facilities. These emerged as alternative motivations for patronage behavior and issue-specific and generalized dis/satisfaction perceptions during exploratory focus groups conducted in the preliminary stages of the study. Although anecdotally derived, expected linkages between these predictors and dis/satisfaction are fairly direct, and can be *post hoc* theoretically anchored with relative ease. Both reputational and loyalty effects should moderate dis/satisfactions resulting from waits; such effects can be hypothesized using dissonance theory, self-perception theory, and attitude theory (Bem, 1967; Festinger, 1957; Osgood and Tannenbaum, 1955; Ross et al., 1983). These related theories postulate that the innate need for consistency with previous cognitive structures (i.e., attributions of reputation) and previous behavioral patterns (i.e., loyalty) will cause dissatisfied customers to either reject their previous beliefs and actions as mistakes (a stressful option) or, more plausibly, cause them to rationalize their dissatisfaction by external attributions and other displacement mechanisms.

Similarly, the availability of different specialties within the

same facility should enhance the “total value” perceptions related to the care provider; consequently, patients may ascribe inconveniences and waits encountered to external structural factors associated with managing complex facilities. External attributions, in turn, should mitigate dissatisfaction. Finally, perceptions of waiting time in other similar facilities can be theoretically directly linked to social exchange theory’s comparison level (CL) (cf., Thibaut and Kelley, 1959; Anderson and Narus, 1984; Dant and Monroe, 1987). If these alternative experiences (whether direct or vicarious) have been adverse, waits encountered should be more charitably interpreted than if these alternative experiences entailed shorter waits. In sum, a moderating influence on customer dis/satisfactions is forecasted.

## Research Objectives Revisited

Recall that although our primary research goal remains the evaluation of the dichotomy premise (i.e., the theoretical separation of the issue-specific and generalized perceptions of dis/satisfaction) in services channels, casting this core question empirically in context of health care services channels has introduced certain unique complications. The net result has been an expansion of the research objectives to include certain secondary, context-driven goals. As previously noted, although we were glad to discover a well articulated issue-specific source of dis/satisfaction (namely, waiting dis/satisfaction) in this literature, the precise theoretical links between issue-specific waiting and general dis/satisfaction could not be specified (beyond the general statement of the dichotomy premise) because the two types of dis/satisfactions have not been investigated together within a single study. Second, because waiting times vary considerably across different health care delivery channel formats (e.g., private physician office, walk-in clinic), and because no study has evaluated these dis/satisfaction perceptions across alternate channel formats in a comparative mode, nomological rigor required us to explore more than one channel format. We accomplish this by testing the dichotomy premise for private physicians as well as walk-in clinics channels. Finally, our literature review has identified a long list of predictors of issue-specific waiting and general dis/satisfactions (Table 1). However, because they have never been simultaneously investigated within a single study, with the goal of obtaining estimates of their relative significance, we decided to include all specified predictors in our empirical design. Presumably, this design should provide richer nomological insights. Note that literature links the isolated battery of predictors to both outcome variables (i.e., issue-specific waiting and general dis/satisfactions).

Based on the above, we can re-state this study’s research objectives as:

1. To empirically assess the dichotomy of issue-specific (i.e., waiting) versus generalized dis/satisfactions by examining the relative impact of the 14 predictors on gen-

eral dis/satisfaction and on issue-specific waiting dis/satisfaction.

2. To carry out the above empirical assessment across alternative health care delivery channels of private physicians (traditionally thought to provide the baseline of expectations about health care to patients) and walk-in clinics (a comparatively new, rarely investigated delivery format stressing non-traditional customer benefits; cf., Dant, Lumpkin, and Bush, 1990).

A final research goal of this study was to explore the relationships between issue-specific dis/satisfaction and generalized dis/satisfaction, albeit in an exploratory mode. Recall that the theoretically vested linkages between these two categories of perceptions are purported to be complex, and require the incorporation of other variables. For instance, social exchange theoretic formulation calls for the destruction of expectations of a balanced exchange relationship before a series of issue-specific dis/satisfactions would convert into generalized dis/satisfactions (Dant and Monroe, 1987). Investigation of such intervening relationships was deemed beyond the scope of the current project.

## Methodology

### Sampling Frame and Sampling Procedures

The data for this study were obtained via telephone interviews using trained interviewers. The sample was randomly drawn using the residential sections of current telephone directories of 15 cities in five contiguous U.S. states. Due to the focus of the study, the existence of established walk-in clinics guided the choice of cities. Only those adults who had personally been or taken someone else to a medical doctor within the past six months were qualified. National statistics report the average number of visits made to physicians per year to range from 4.5 for males to 6.2 for females (National Center for Health Statistics, 1987). Consequently, the screen was considered reasonable in that it was expected that most respondents would have made two to three trips within the specified six-month time frame, and would be able to recall sufficient details of their medical visits. In addition, there is considerable literature precedence for using such eligibility screens extending up to 12 months (e.g., past six months: Dutton, Gomby, and Fowles, 1985; Young et al., 1985; past eight months: King and Goldman, 1975; past twelve months: Berkavovic and Marcus, 1976; Comstock and Slome, 1973). However, to the extent the six-month time frame may have resulted in recall-loss (Churchill, 1995, p. 408) for some respondents, this design feature remains a weakness of this study. Alternative methodologies of (1) telephone interviews within a few days of the medical visit, and (2) exit interviews were explored in the planning stages. However, these approaches were abandoned primarily because (respectively) the health care providers felt that providing lists of their patients would not be

ethical, and exit interviews would encroach on their patients' anonymity. Finally, an eligibility requirement of a more recent medical visit within (say) three days would have led to a severe attrition in the realized sample size.

Because of our interest in comparing the alternative channels of walk-in clinics and private practitioners, those who visited other health care delivery formats such as hospitals or hospital emergency rooms were disqualified. Potential respondents were provided with a definition of "walk-in clinics" prior to questionnaire administration. In addition, for each city, examples of walk-in clinics were prepared in advance, and used to concretely illustrate the type of clinics being investigated. No call-back protocols were developed because of the large available sampling frames. If a number was busy or if there was no answer, the interviewers made a log entry and called other numbers. This was primarily an expediency driven decision.

Reliance on telephone directories for specifying the sampling frame is always somewhat problematic because they quickly become out-dated; moreover, the incidence of unlisted numbers makes them an incomplete source of data (Churchill, 1995). However, alternate sources of general population listings are artifactual in their own special ways. Finally, the no call-back protocol may have introduced some potential sampling-frame bias if the nonavailability patterns of potential respondents systematically differed across the targeted groups. However, there were no *a priori* reasons to expect any such systematic patterns of errors associated with the adopted procedures. To the extent these doubts cannot be eliminated, however, such procedures also remain potential limitations of the method employed. Based on our exploratory research experience, our expectation is that such artifactual effects, if any, are likely to be trivial. Based on the guidelines suggested by the Council of American Survey Research Organizations task force for estimating response rates when eligibility screens are involved (cf., Wiseman and Billington, 1984, p. 337; Churchill 1995, p. 664), a 40.48% response rate was achieved ( $n = 602$ ).

Most respondents (63%) were married while 14% were divorced or widowed, and 23% were single. Women (58%) outnumbered men (42%) in the sample. In terms of age, most respondents belonged to the two age categories of 35 years or less (42%) and 36 to 50 years (35%), with the rest (23%) being older. For income, the greatest representation came from the \$20,000 or less (24%) and the \$20,001 to \$30,000 (25%) categories with the rest divided as 16% in the \$30,001 to \$40,000 group, 15% in the \$40,001 to \$50,000 group, and 20% belonging in the \$50,001 plus bracket. A majority had college degrees (40%) and 10% held graduate degrees; 30% had attended some college, while the remaining 20% had high school degrees or less. Direct comparisons of received profiles with population demographics are not meaningful because of the screens employed in selecting the respondents.



### Survey Instrument and Operationalizations

The instrument included questions about the respondents' last medical visit as well as their demographic characteristics. Anticipating that there would be respondents who patronized both private physicians and walk-in clinics, the respondents' were requested to answer the questions as they pertained to the facility they visited last. Consequently, the categorization of patrons into clinic users and private physician users is not meant to imply that those patrons utilized that particular channel format exclusively. However, 89% of the respondents indicated they had a regular clinic or physician and, for the large majority (72%) of the cases, the last visit had been made to their regular facility. A comparison between those who did and those who did not have a regular facility revealed no statistically significant differences.

**WAITING TIME MEASURES.** Respondents were directly asked to estimate, in minutes, the time they had spent waiting in the waiting and the examination rooms during their last visit. As such, in the terminology of Taylor (1994), wait measures utilized in this study were focused on the delays and process aspects of the pre-process wait, and were perceptual as opposed to objective (i.e., clocked at the facility). There is a strong tradition for such a measurement approach. Out of the 23 studies that tested effects of waiting time, 15 had used perceptual measures even when the referenced periods recalled were as long as 12 months. Conceptually, such perceptual measures are not problematic in that they yield estimates of perceived reality which may be more meaningfully responsible for the retained perceptions of dis/satisfaction than objective measures. Of course, a respondent who has made a recent medical visit may more accurately recall his/her waiting time experience. To verify empirically if the recency of their last medical visit had an impact on the dis/satisfaction measures (while containing the experimentwise type I error to  $\alpha = 0.05$ ), MANOVA analyses were carried out using the number of actual visits made in the last six months as the grouping variable. The data yielded nonsignificant results suggesting that dis/satisfaction ratings were not influenced by the recency of medical visits. This finding also provides additional vindication for the use of the six-months time frame for the respondent's medical visits as a screen for respondent eligibility.

**LOYALTY.** Loyalty was measured by the number of years the respondent had been patronizing the local health care provider. Although such loyalty measures are well accepted in the literature, in retrospect, such a measure is confounded by respondents' age and length of time in the community, and may be artifactual in the mobile segments of the population. This remains a limitation of the present study.

**COMPARISON WITH EXPERIENCE.** This measure of present versus past experiences was obtained using the response categories of longer than usual, about the usual, and less than usual. These responses were dummy coded in analyses using the

neutral response category (about the usual) as the reference category.

**REASONABLENESS OF WAIT.** This was measured using scales anchored with 1 = less waiting time, 2 = about the same waiting time, and 3 = longer waiting time as response categories. Hence, larger scores represent perceptions of similar or longer waiting time at other facilities. As argued before, both social exchange theory and disconfirmation theory suggest that perceptions of waiting time at other facilities (vicarious or direct) will be used to define the referent structures or the yardsticks patients will use in judging the reasonableness of waits.

**REMAINING PREDICTOR MEASURES.** The remaining nine independent variables (i.e., physician related factors of competence, friendliness, health information provided, and reputation; the availability of quick appointments, and different specialties in the same building; and the situational factors of accessibility, affordability, and friendliness of staff) were measured by asking the respondents to indicate the degree to which the focal health care provider exhibited each of those attributes/characteristics. Anchors of 1 = not at all, 2 = only somewhat, and 3 = very much so were supplied with each statement to the respondents. Hence larger scores represent more positive evaluations.

**OUTCOME DIS/SATISFACTION MEASURES.** The dependent variables of issue-specific (i.e., waiting) dis/satisfaction and generalized dis/satisfaction were measured using scales anchored with 1 = satisfied, 2 = neutral, and 3 = dissatisfied. In terms of generalized dis/satisfaction, 89% of the respondents reported satisfaction, 4% were dissatisfied, and the remaining 7% reported a neutral response. With respect to issue-specific (waiting) dis/satisfaction, only 72% were satisfied, while 10% were dissatisfied and 18% were neutral. Such general positivity of responses is a commonplace occurrence in health care research stream (Berkanovic and Marcus, 1976; Dutton, Gomby, and Fowles, 1985; Kasper and Berk, 1981; Gillette, Bryne, and Cranston, 1982). For instance, Gillette, Bryne, and Cranston (1982, p. 169) found 85.4% ( $n = 264$ ) reporting satisfaction, 9.7% ( $n = 30$ ) claiming dissatisfaction, and only 4.9% ( $n = 15$ ) reporting neutral responses to their general dis/satisfaction measures. Similarly, Kasper and Berk (1981), reporting on their large-scale national survey ( $n = 12,320$ ), found only 14.5% of the respondents answering dissatisfied to their issue-specific waiting dis/satisfaction measures in the comparable region of the United States.

Such positivity of responses can be explained by a need for cognitive consistency on the part of the respondents (Bem, 1967; Ross et al., 1983) and is likely to remain a recurrent trend in health care research. That is, when respondents are reporting on dis/satisfaction regarding the medical services they currently utilize, a negative response is likely to evoke stress resulting from the inconsistency between attitude and behavior. As a result, respondents may be prone to rationalizations ("I use it: hence I must like it") and would report general

dissatisfaction only when such perceptions are heightened. Issue-specific waiting dissatisfaction is more likely to be reported being an attribute-specific evaluation. Both the present results and the past literature trends are supportive of this reasoning.

Three-point scales were used (except for waiting time and loyalty measures) primarily to reduce the complexity (and thus increase the accuracy) of obtaining scaled responses over the telephone. While cognizant of range restriction issues associated with the use of 3-point scales, our judgment call was based on the trade-offs involving other systematic biases that could result from the complexity of administering 5-point scales over the telephones (i.e., confusion and respondent fatigue). On a more positive note, Jacoby and Mattel (1971) have shown that 3-point scales are sufficient to meet the criteria of reliability and concurrent and predictive validity. Further, using a series of simulations, Lehmann and Hulbert (1972) concluded that 3-point scales adequately overcome the rounding error biases when the researcher is interested in averages across people (as here). More recently, Celsi et al. (1992) have demonstrated the psychometric robustness of even 2-point scales using a structural equations evaluation.

### Analytical Techniques

Multivariate analysis of variance (MANOVA) was employed as the principal statistical tool to assess the research questions. MANOVA is a useful technique when there are multiple metric criterion variables and one categorical predictor variable (e.g., dis/satisfaction categories) (Green, 1978). Multiple discriminant analysis (MDA) is often used in conjunction with MANOVA to facilitate the determination of the direction and intensity of the relationships revealed by MANOVA (Tatsuoka, 1971). While MANOVA tests the departure from the null hypothesis, MDA determines the combination of variables which maximize this departure from the null hypothesis. Thus, studying the contribution of each criterion variable to the discriminant function can enhance the understanding of the differences across the dis/satisfaction groups. For the variables entered in the MDA, the univariate *F*-test indicates any significant differences among the group means. The MANOVA routine used is based on the general linear model approach, and, consequently, is appropriate for unequal group sizes (Perreault and Darden, 1975).

## Results

### Factors Influencing Generalized Dis/Satisfaction

The findings on the relative impact of the 14 predictors on generalized dis/satisfaction perceptions are presented in Table 2 for private physicians sample ( $n = 397$ ) and Table 3 for the walk-in clinics sample ( $n = 205$ ). Because the literature review (Table 1) had revealed considerable variance in the magnitude of effects across alternate health care channel for-

mat, the entire sample was not analyzed as a homogeneous group. Initial analyses were carried out with each sample categorized into the three classes of satisfied, neutral, and dissatisfied respondents. However, the comparison of group means revealed three significant curvilinear trends (out of a total of 30 comparisons) where the neutral respondents' answers did not linearly fit in the trends defined by the satisfied and the dissatisfied groups. Such curvilinear trends were not expected on *a priori* theoretical grounds. Presumably, respondents reporting neutral response to generalized dis/satisfaction measures were more prone to utilizing a compensatory judgment schema in that they were letting other attributes mitigate their dis/satisfaction ratings. These patterns could have also occurred because of the general positivity phenomenon alluded to earlier (i.e., needs of cognitive consistency and stress reduction may have prompted the respondents to use *post hoc* rationalizations which led to more charitable evaluations of their current service channels). Because the objective was to probe the predictors that did discriminate between the satisfied and dissatisfied groups, the neutral respondents ( $n = 27$  and  $n = 21$ , respectively, for the private physicians and the walk-in clinic channels) were omitted from the final (reported) analyses. Consequently, the analyzed sample sizes were reduced to 370 and 184 for the private physician channel and walk-in clinic channel, respectively.

As Tables 2 and 3 show, both sets of MANOVA/MDA results were statistically significant, indicating that dis/satisfaction groups did, in fact, discriminate across the predictor set. Moreover, the multivariate findings were accompanied by very high statistical power ( $1-\beta > 0.99$ ) (Cohen, 1977) for both groups. Power can be conceptually defined as the probability of correctly rejecting the null hypothesis when it is false (i.e., correctly finding a hypothesized relationship when it exists) (Hair et al., 1995). Mathematically stated as  $1-\beta$  (where  $\beta$  refers to the type II error), power is computed as a function of  $\alpha$  (i.e., type I error), sample size, and effect size (Cohen, 1977). Because of the positivity biases in responses to dis/satisfaction measures discussed earlier, the groups are skewed toward the "satisfied" response. Hence, even though MANOVA procedure is robust to unequal group sizes, power estimates were obtained for all comparisons as a cautionary measure, and inferential conclusions are drawn only when accompanied by power exceeding the yardstick of power ( $1-\beta > 0.70$ ; Cohen, 1977) to ensure adequate statistical conclusion validity. Effect size estimates ( $R^2$  values) are also reported throughout. Significant canonical loadings were directionally correct for both groups, and univariate *F*-tests show five and seven predictors to be significant and usable ( $\alpha < 0.05$ ; power,  $1-\beta > 0.70$ ) for the private physician channel (Table 2) and the walk-in clinic channel (Table 3), respectively.

Interestingly, for patrons utilizing the private physicians channel (Table 2), the most important predictor of generalized dissatisfaction (based on  $R^2$ ) was examination room waiting

**Table 2.** Determinants of General Dis/Satisfaction within the Private Physician Channel

	Canonical Loadings	F-test P-value	R <sup>2</sup>	Power	Means	
					Satisfied Group (n=355)	Dissatisfied Group (n=15)
Examining room waiting time	-0.463	0.000	0.037	0.96	12.287	22.296
Technical competence of the physician	+0.430	0.001	0.032	0.93	2.887	2.600
Good reputation of health care provider	+0.366	0.003	0.024	0.84	2.830	2.533
Friendliness of staff	+0.335	0.007	0.019	0.76	2.608	2.267
Reasonableness of wait	+0.307	0.014	0.017	0.70	2.718	2.200
Friendliness of physicians	+0.270	0.030	0.013	0.58	2.765	2.533
Amount of health information provided	+0.248	0.046	0.011	0.51	2.803	2.579
Comparison with experience (longer than usual)	-0.221	0.075	0.009	0.43	0.123	0.286
Availability of appointments	-0.217	0.081	0.008	0.41	2.510	2.667
Specialties in the same building	-0.163	0.190	0.005	0.26	1.850	2.200
Accessibility	-0.144	0.245	0.004	0.21	2.296	2.533
Waiting room time	-0.143	0.248	0.004	0.21	22.344	37.726
Comparison with experience (less than usual)	-0.137	0.269	0.003	0.20	0.189	0.071
Loyalty	+0.119	0.335	0.003	0.17	4.475	3.664
Affordability	-0.085	0.491	0.001	0.10	2.376	2.467
<b>Multivariate function</b>		0.000		0.99		

time. As a comparison of means reveals, an average of 12 minutes of wait was acceptable (mean for the satisfied group) but 22 minutes of wait led to dissatisfaction. Four other predictors exerted significant influences (also accompanied by sufficient statistical power,  $1-\beta$ ) on generalized satisfaction perceptions; and judging by the direction of means (Table 2), their impact on generalized satisfaction was positive. In rank order, these were: technical competence of the physician, good reputation of health care provider, friendliness of staff, and reasonableness of wait.

Regarding the walk-in clinic channel (Table 3), the two most important predictors of generalized satisfaction were technical competence of the physicians and the amount of health information divulged (arguably, also a surrogate for judging competence as discussed earlier). These were followed by two other physician-specific predictors (reputation and the friendliness of the physicians), and the friendliness of staff. Next, waiting room waits were a significant source of generalized dissatisfaction. An average of 20 minutes of wait was acceptable in this service channel; however, only waits as high as 54 minutes on the average led to generalized dissatisfaction. Finally, quicker availability of appointments was also a significant source of generalized satisfaction within this channel.

### Factors Influencing Issue-Specific Waiting Dis/Satisfaction

Tables 4 and 5 report the relative impact of the same 14 factors on issue-specific waiting dis/satisfaction perceptions for patrons of private physicians channel and walk-in clinics channel, respectively. Once again, the multivariate results

were significant with high statistical power ( $1-\beta = 0.99$ ) for both channels, allowing for the subsequent univariate interpretation of results. Again, all significant canonical loadings were directionally correct. Four curvilinear relations (out of 30 comparisons) were uncovered when the neutral category respondents were initially included. Hence, as before, these were omitted, and the reported results are restricted to satisfied and dissatisfied groups. Relative to the generalized dis/satisfaction analyses (Tables 2 and 3), a larger proportion of respondents reported dissatisfaction, although the data are still skewed in favor of the satisfied group. As before, only significant comparisons accompanied by power greater than 0.70 are interpreted.

Private physicians channel yielded nine significant predictors with power exceeding the 0.70 level (Table 4). However, for the walk-in clinic channel (Table 5), only two significant predictors can be interpreted with confidence (i.e., had requisite statistical power). The three most important factors for the private physician group were waiting related: attributions of longer than usual wait, waiting room wait in excess of 45 minutes, and examination room waits beyond 22 minutes resulted in waiting dissatisfaction. Next, the amount of health information divulged helped to reduce the negative perceptions, and led to satisfaction with the waiting experience. Two other waiting related predictors—quicker availability of appointments and attributions of less than usual waits—resulted in satisfaction perceptions. The remaining significant predictors were physician friendliness, physician reputation, and greater affordability. With respect to the walk-in clinic channel, waits in the waiting room resulted in a strong level

**Table 3.** Determinants of General Dis/Satisfaction within the Walk-In Clinic Channel

	Canonical Loadings	F-test P-value	R <sup>2</sup>	Power	Means	
					Satisfied Group (n=175)	Dissatisfied Group (n=9)
Technical competence of the physician	+0.719	0.000	0.249	0.99	2.874	2.000
Amount of health information provided	+0.552	0.000	0.163	0.99	2.815	2.100
Good reputation of health care provider	+0.381	0.000	0.085	0.98	2.712	2.100
Friendliness of physician	+0.323	0.001	0.063	0.93	2.766	2.240
Friendliness of staff	+0.289	0.002	0.051	0.87	2.606	2.000
Waiting room time	-0.265	0.005	0.043	0.81	20.958	54.397
Availability of appointments	+0.245	0.009	0.037	0.75	2.631	2.100
Comparison with experience (less than usual)	-0.186	0.047	0.022	0.51	0.177	0.444
Loyalty	-0.186	0.048	0.021	0.51	3.570	4.796
Examining room waiting time	-0.141	0.128	0.013	0.33	11.656	26.344
Affordability	+0.127	0.172	0.010	0.27	2.445	2.139
Specialties in the same building	+0.092	0.323	0.005	0.18	1.833	1.700
Accessibility	-0.051	0.585	0.002	0.05	2.439	2.600
Comparison with experience (longer than usual)	-0.031	0.741	0.0006	0.05	0.080	0.111
Reasonableness of wait	-0.002	0.983	0.0000	0.03	2.761	2.800
<b>Multivariate function</b>		0.000		0.99		

of waiting dissatisfaction. An average of 18 minutes of wait was acceptable, but about 45 minutes of wait led to clear rejection. On the other hand, physician reputation had the expected positive effect on waiting satisfaction.

**Relationship between Generalized and Issue-Specific Waiting Dis/Satisfactions**

Recall that the evaluation of the direct relationship between the two dis/satisfaction measures, being beyond the scope of the present investigation, is mounted in an exploratory mode since the theoretically-vested linkages between these two constructs are complex and require the inclusion of other intervening constructs (e.g., expectations of balanced exchange; cf., Dant and Monroe, 1987). As shown below, we checked for this linkage using product moment correlations between the two intervally measured (i.e., no longer dichotomized as in MDA and MONOVA but in their original form) dis/satisfaction constructs. Effect size and statistical power estimates were also computed:

Private Physicians Channel	$r = .2212$	$p < .0001$	$R^2 = .05$	$1-\beta = .98$
Walk-In Clinics Channel	$r = .2079$	$p < .001$	$R^2 = .04$	$1-\beta = .89$
Both Channels Combined	$r = .2159$	$p < .0001$	$R^2 = .05$	$1-\beta = .99$

The data show that the generalized and issue-specific waiting dis/satisfaction constructs are positively correlated. This pattern lends credence to the theoretical argument that issue-specific perceptions can influence generalized perceptions, and the previous empirical findings that waiting dissatisfaction can have a deleterious impact on overall patient dissatisfaction

(Dans, Johnson, and King, 1989; Kasper and Berk, 1981; Piper, 1989; Smith et al., 1989; Weissberg et al., 1986). Simultaneously though, and consistent with the dichotomy premise (Dant and Monroe, 1987), the magnitude of effects (R<sup>2</sup>) are expectedly small, indicating that this linkage may be tenuous in a causal sense and/or indirectly vested only through other variables. The pattern of findings, hence, underscores the essential theoretical separation of the generalized and issue-specific dis/satisfaction judgments. However, these exploratory results beg additional research in this area.

**Discussion and Conclusions**

The data appear to vindicate the dichotomy premise or the theoretical separation of generalized versus issue-specific (operationally, waiting) dis/satisfaction perceptions within services channel context, but with some important qualifications. Foremost, even though the health care literature has linked the same predictor set to both outcome measures, major differences are revealed in the patterns of significant relationships. In the case of the private physicians channel, a comparison of Tables 2 and 4 (i.e., generalized versus issue-specific dis/satisfactions) shows that generalized dis/satisfaction judgments are seemingly less complex than the issue-specific dis/satisfaction judgments. Support for this conclusion comes from the number of predictors found to be significantly related to the outcome measures: Table 2 reveals five significant effects (with requisite power) whereas Table 4 shows nine significant effects. Hence, the chemistry of an issue-specific judgment appears to be driven by more considerations than that of a global judgment. Apparently, respondents, being patrons of the focal service channel, find it difficult to critique their

**Table 4.** Determinants of Waiting Dis/Satisfaction within the Private Physician Channel

	Canonical Loadings	F-test P-value	R <sup>2</sup>	Power	Means	
					Satisfied Group (n=287)	Dissatisfied Group (n=32)
Comparison with experience (longer than usual)	-0.670	0.000	0.237	0.99	0.007	0.625
Waiting room time	-0.582	0.000	0.189	0.99	17.594	45.743
Examining room waiting time	-0.318	0.000	0.065	0.99	11.234	22.885
Amount of health information provided	+0.300	0.000	0.059	0.99	2.829	2.437
Availability of appointments	+0.247	0.000	0.041	0.95	2.566	2.187
Friendliness of physicians	+0.206	0.003	0.028	0.86	2.790	2.531
Good reputation of health care provider	+0.205	0.003	0.028	0.85	2.856	2.625
Affordability	+0.204	0.003	0.028	0.85	2.433	2.094
Comparison with experience (less than usual)	+0.172	0.011	0.020	0.72	0.220	0.031
Friendliness of staff	+0.158	0.020	0.017	0.64	2.637	2.406
Technical competence of the physician	+0.148	0.029	0.015	0.60	2.891	2.750
Reasonableness of wait	+0.117	0.084	0.009	0.41	2.673	2.406
Loyalty	+0.046	0.497	0.001	0.09	4.418	4.127
Specialties in the same building	+0.042	0.537	0.001	0.05	1.842	1.750
Accessibility	-0.017	0.798	0.0002	0.04	2.313	2.343
<b>Multivariate function</b>		0.000		0.99		

channel in generalized terms for cognitive consistency reasons. Note too, that the channel in question—the private physicians—is the acknowledged traditional health care delivery channel, long thought to define the baseline of expectations about health care to patients. Hence, hesitancy on the part of its patrons is not unexpected. However, when it comes to specific judgments, no such doubts seem to bother the respondents. In this vein, it is noteworthy that the absolute size of the dissatisfied group more than doubles for issue-specific dis/satisfaction (Table 4) as compared to Table 2.

Analogous comparisons for the walk-in clinics channel (i.e., contrasting generalized versus issue-specific dis/satisfactions effects of Tables 3 and 5), we again find major differences in the chemistry of the two judgments. For this channel, the global judgment emerges as the more complex one (i.e., seven significant predictors with requisite statistical power, Table 3) relative to the issue-specific judgment (i.e., only two significant predictors, Table 5). The most plausible explanation for this reversal of complexity sequence (compared to private physicians) appears to be the relatively nontraditional image of this service format. Presumably because of its newness, patrons appear less assured in stating their overall evaluations of this service channel. Note too that the nature of this service channel (i.e., where patrons are served on a first-come basis, and where appointments with specific physicians are not permitted by definition; cf., Dant, Lumpkin, and Bush, 1990) does not foster close customer-supplier relationships; this factor may also have potentially contributed to the respondents' hesitancy regarding their global judgments.

The above inter-channel differences suggest the need for a more detailed examination of the contextual variables that may be driving the observed patterns. However, importantly, in both service channels we see a clear separation of general-

ized and issue-specific dis/satisfaction judgments. The dichotomy premise, as argued before, is also supported by the weak empirical linkages between the generalized and issue-specific dis/satisfaction perceptions (i.e.,  $R^2 = 0.05$ ). Clearly, the results also point to important conclusions specific to the context of health care services channel.

First, this initial effort at simultaneously investigating all 14 predictors identified by the literature as sources of customer dis/satisfaction, affords insights into their relative significance hitherto not available. Parallel analyses of these 14 factors across two distinct health care delivery channels also provide insights into the stability of these factors' relative effects under different settings. Notably, some of the predictors of customer dis/satisfaction specified in the literature (Table 1) only matter for certain outcome variables and/or certain channels while others fail to emerge as viable predictors altogether when integrated into a comprehensive evaluation (e.g., accessibility, loyalty, and the presence of different specialties in the same building never emerge as viable predictors of customer dis/satisfaction). Second, data strongly support a pattern of major inter-channel differences in the manner in which combinations of predictors have influenced the two outcome measures. As alluded above, these patterns underscore the need for analogous investigations in alternative channels, and bring to mind the caveat regarding external validity in channels being a relatively moot point. Third, another original contribution of this study has been the direct assessment of the relationship between the two dis/satisfaction measures, albeit in an exploratory mode. The following sections amplify on these themes.

Tables 2 and 3 provide an interesting contrast in terms of emergent hierarchies of effects for the private physicians and the walk-in clinic channels. In both cases, two wait-related factors emerged as significant; however, the differences in

**Table 5.** Determinants of Waiting Dis/Satisfaction within the Walk-In Clinic Channel

	Canonical Loadings	F-test P-value	R <sup>2</sup>	Power	Means	
					Satisfied Group (n=148)	Dissatisfied Group (n=18)
Waiting room time	-0.725	0.000	0.200	0.99	18.106	44.880
Good reputation of health care provider	+0.348	0.002	0.054	0.86	2.726	2.333
Amount of health information provided	+0.262	0.022	0.032	0.63	2.802	2.555
Comparison with experience (less than usual)	+0.261	0.023	0.031	0.63	0.230	0.000
Comparison with experience (longer than usual)	-0.255	0.026	0.029	0.61	0.067	0.222
Technical competence of the physician	+0.239	0.036	0.026	0.55	2.838	2.611
Accessibility	-0.208	0.068	0.020	0.45	2.378	2.666
Friendliness of staff	+0.176	0.121	0.015	0.34	2.615	2.388
Loyalty	-0.171	0.132	0.014	0.32	3.680	4.411
Affordability	+0.130	0.251	0.008	0.21	2.479	2.300
Availability of appointments	+0.098	0.387	0.004	0.17	2.764	2.666
Friendliness of physicians	+0.093	0.413	0.004	0.17	2.577	2.444
Specialties in the same building	-0.037	0.744	0.0006	0.05	1.822	1.889
Examining room time	-0.033	0.774	0.0005	0.05	11.587	12.160
Reasonableness of wait	+0.029	0.799	0.0004	0.04	2.777	2.722
<b>Multivariate function</b>		0.000		0.99		

their relative ranks suggest that physician-specific competence-related attributes continue to impact dis/satisfaction judgments for the walk-in clinics channel while physician-specific predictors are relatively less salient in private physicians channel. We attribute this to the more impersonal nature of the walk-in clinic channels. Alternatively, customers of the private physicians channels, due to their past interactions with the same physicians, may feel more secure in the assured quality and continuity of their relationship. At any rate, the larger inference should be not to become presumptuous about the internal chemistry of alternative service channels.

Another noteworthy contrast across the two channel groups is evident in the stark differences in the magnitude of effects (R<sup>2</sup> values). The strongest effect for the private physicians channel (for examination room wait) is equal to the smallest interpreted effect for the walk-in clinic channel (availability of quick appointments). This shows that the clinic group is given to stronger opinions regarding the evaluation of dis/satisfaction with health care services. In contrast, the physician group is more complacent, presumably arising out of the same security and confidence discussed above. Other indications of this complacency come from the fewer strong factors (five compared to seven) for the physician group, and lower ratings by this group for attributes such as amount of medical information shared.

Regarding the specific dis/satisfactions related to the wait issue, the most striking contrast between the two channels (Tables 4 and 5) is provided by the number of predictors driving the waiting dis/satisfaction perceptions: nine for the physicians channel and only two for the clinic channel. Waiting dis/satisfaction, then, is a far more important issue in the physicians channel than the clinics channel, and perceptions of unreasonable waits resulted in clear negative sentiments in

the physicians channel. Other non-wait predictors served to increase waiting satisfaction (i.e., had a mitigating influence); however, these positive effects were relatively weaker than the above negative effects.

Finally, past literature (Table 1) had yielded some counter-intuitive effects for the wait-related predictors. Specifically, certain categories of waits had a greater impact on generalized rather than issue-specific dissatisfaction perceptions. The present study resolves this anomaly as all interpretable wait-related predictors impact more on issue-specific (i.e., waiting) rather than general dis/satisfaction perceptions. Hence, the results of our simultaneous investigation of the complete predictor set have hopefully provided some clearer insights into the behavior of these predictors. We hope future researchers will utilize our findings as benchmarks in formulating their own research agendas across hitherto untested service channels. Clearly, the dichotomy premise deserves to be investigated in other settings because it can isolate specific sources of concern requiring direct managerial action.

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