


The Influence of Guest Perceptions of Service Fairness on Lodging Loyalty in China

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By Robert J. Kwortnik, Jr.¹ and Xiaoyun Han²

Abstract

This research is motivated by an important but largely unexamined question: how do guest perceptions of service fairness influence loyalty in a lodging context? To address this question, this study presents a conceptual model of service fairness and loyalty and tests that model using data collected from 601 customers of six hotels in China. Results support a multidimensional view of service fairness that comprises three dimensions. Two of those dimensions, distributive justice (fair outcomes) and interactional justice (fair treatment by staff), have larger effects on customer loyalty than does the third dimension, procedural justice (fair processes and procedures). A key implication is that hotel managers should train their employees to understand that guests' evaluation of a service (and subsequent trust and loyalty) depends not only on specific service outcomes, but also on how guests feel they have been treated by employees.

Keywords

service fairness, customer loyalty, hotels, structural equation modeling

Management scholars and practitioners generally agree that loyal customers are vital to the long-term success of hospitality organizations (Bowen and Shoemaker 2003; Skogland and Siguaw 2004). Hoping to build the bond between customer and firm, hospitality firms of all types have famously tried an array of so-called loyalty programs, which are in reality repeat-purchase rewards programs (Clausing 2008; Hendler and LaTour 2008). However, encouraging loyalty through financial incentives or structural ties can be costly, easily imitated by competitors, and of dubious effectiveness (Zeithaml, Bitner, and Gremler 2009). Instead we argue here that internal service enhancements are more effective in creating customer loyalty than are external incentive programs that can be difficult to sustain.

Following on studies that have highlighted relational constructs such as trust in the organization as determinants of service loyalty (Garbarino and Johnson 1999; Han, Kwortnik, and Wang 2008; N'Goala 2007), we adopt the position advocated in the social-psychology literature that a building block of relationship quality and, ultimately, service loyalty is fairness in the service exchange (Aurier and Siadou-Martin 2007). Consequently, this study investigates the multidimensional influence of customer perceptions of service fairness on service loyalty. Specifically, we address the following question: do guests' perceptions of distributive, procedural, and interactional justice differentially influence the formation of loyalty? Furthermore, in light of research which suggests that fairness perceptions may differ across cultures (e.g., Hui and Au 2001; Mattila and Choi

2006), this study examines consumers' perceptions of service fairness using data from 601 hotel customers in the People's Republic of China. As a contrast, we compare the hotel guests' results to data from mobile phone customers to show the relative importance of different dimensions of fairness on loyalty for lodging guests versus customers of a service with less social meaning and interaction.

We believe that this study fills gaps in loyalty research, since few studies have examined the connection of fairness with loyalty in Asia and since it examines a construct—service fairness—that has received scant attention (outside of research on service failure and recovery) (cf. Aurier and Siadou-Martin 2007; N'Goala 2007). We start by highlighting the conceptual underpinnings of the fairness construct that guides our research questions and then we present our service fairness and loyalty model. After describing our survey-based research methods and structural equation modeling (SEM) analysis and results, we close with a discussion of theoretical and managerial implications of our findings for hospitality managers and offer ideas for future research on service fairness.

¹Cornell University School of Hotel Administration, Ithaca, New York
²Business School, Sun Yat-sen University

Corresponding Author:

Xiaoyun Han, Business School, Sun Yat-sen University, Guangdong, China, 510275
Email: hanxy@mail.sysu.edu.cn

Service Fairness and Customer Loyalty: Conceptual Background

Consumers' perceptions of service fairness reflect their evaluations of "rightness" or equity in the exchange of value with service providers (Oliver 1997). Scholars identify *equity* in buyer–seller relationships as essential to the core marketing activity of exchange, in which customers compare the inputs and outcomes of the exchange (Oliver and Swan 1989; Huppertz, Arenson, and Evans 1978, p. 250). The theoretical focus of this early work on service fairness was the effects of distributive justice on customer satisfaction (Oliver and Swan 1989). Subsequent research, however, showed that customers also evaluate service processes and encounters with employees (Blodgett, Hill, and Tax 1997), which reveals the multidimensional nature of service fairness judgments and includes procedural and interactional justice (Clemmer and Schneider 1996).

Distributive Justice

Considerable research shows that customers apply their view of distributive justice to evaluate the fairness of service exchanges, especially when outcomes deviate from expectations (Aurier and Siadou-Martin 2007; Blodgett, Hill, and Tax 1997; Oliver 1997). Compared to procedural and interactional justice, distributive justice is most grounded in the principle of equity with respect to outcomes, in terms of "money's worth," time and effort, and emotional and ego costs (Aurier and Siadou-Martin 2007; McCollough, Berry, and Yadav 2000). Research suggests that although distributive justice is essential for perceptions of overall service fairness (Smith, Bolton, and Wagner 1999), providing fair outcomes alone may be insufficient, particularly when customers perceive the means and manner of service delivery to be unfair (McCollough, Berry, and Yadav 2000; Tax, Brown, and Chandrashekar 1998).

Procedural Justice

Service customers also evaluate *procedural justice* by considering their perceptions of the fairness of how service exchanges are conducted in terms of policies, processes, and procedures (Blodgett, Hill, and Tax 1997), most notably in conjunction with service recovery (see Zeithaml, Bitner, and Gremler 2009). Consumers perceive positive procedural justice when they can provide input to and have some control over service exchanges, and when the exchange is conducted in a flexible, timely, and convenient manner (Tax, Brown, and Chandrashekar 1998).

Interactional Justice

The key role played by employees in many service exchanges affects perceptions of *interactional justice*—the manner in

which customers are treated and by which information is communicated during service encounters (Blodgett, Hill, and Tax 1997; Clemmer and Schneider 1996). Evaluations of interactional justice capture such elements as employee courtesy, politeness, honesty, sincerity, and understanding (Aurier and Siadou-Martin 2007; Blodgett, Hill, and Tax 1997; Tax, Brown, and Chandrashekar 1998). For some customers, the fairness of interpersonal treatment is paramount—and rude employee behavior will degrade otherwise fair outcomes and procedures (McCollough, Berry, and Yadav 2000). Again, this type of justice is foremost when service has gone awry, as Tax, Brown, and Chandrashekar (1998) reported that interactional justice had the strongest impact on customer satisfaction and trust in connection with complaint handling.

The relative importance of the individual justice dimensions may depend not only on the specifics of a service exchange, but also on the nature of the service being evaluated. For example, Blodgett, Hill, and Tax (1997) tested the effects of customers' fairness evaluations on repeat purchase and word-of-mouth intentions in a fictitious retail setting and found that interactional justice swamped the other dimensions. In hotel and restaurant scenarios, Smith, Bolton, and Wagner (1999) reported that process failures had a stronger effect on customer satisfaction than outcome failures (interaction failures were not studied); more important, their study showed that customers were more satisfied with service recovery efforts that matched the type of injustice experienced.

Asian Consumers and Service Fairness

Research on cultural differences in the evaluation of services was scant until the late 1990s (Mattila 1999); however, recent studies show that culture can affect consumer judgments. For example, Mattila and Choi (2006) theorized that consumers in collectivist cultures where social harmony, conflict avoidance, "face" (the exchange of courtesy and respect in interpersonal relationships), and group-oriented thinking is the norm (see Hofstede 1980) would respond differently to inequities in hotel room pricing than would consumers in individualistic cultures, where the pursuit of equity (i.e., "getting what I deserve") dominates. Those authors showed that South Korean hotel guests' perceptions of price fairness were unaffected by price changes, though providing explanations for price disparities did affect fairness perceptions; the opposite pattern of effects was observed for American hotel guests. Hui and Au (2001) reported similar results in the context of complaint handling following a service failure at a hotel: Chinese guests were uninfluenced by compensation-based service recovery, but were more likely to perceive service recovery efforts as fair if they could express their concerns to an empathetic, attentive manager; again the opposite pattern of effects was reported for Western (Canadian) guests.

Examining service recovery for casual dining, Mattila and Patterson (2004) drew on a cultural model that balanced interdependence (holism and mutual social dependence) against independence (individuality and self-determination) to show that U.S. consumers are more apt to make internal attributions for a service failure (e.g., the service worker is incompetent), unless an explanation for the failure is offered. In contrast, Asian (Thai and Malay) consumers are less likely to make internal attributions and are, therefore, less affected by external justifications. The authors also found that Asian consumers are less satisfied with compensation following service failures than are U.S. consumers. Looking at service recovery at resorts, Patterson, Cowley, and Prasongsukarn (2006) found differences in the way that such cultural values as power distance (the expectation and acceptance by less powerful members of a society that power is distributed unequally; Hofstede 1980) and collectivism affect justice perceptions in different ways. For example, Thai consumers (collectivist, high power distance) perceived greater distributive justice than did Australian consumers (individualist, low power distance) when an apology was offered by a high-status person (e.g., a manager), as well as greater interactional and procedural justice when service recovery was initiated by the organization as opposed to by the customer.

Overall, this research indicates that Asian consumers value equity that is based less on economic outcomes than on social outcomes. Furthermore, high levels of personalized service are expected in Asia, where service is more institutionalized than in Western cultures (Mattila 1999). This service orientation and such cultural values as collectivism, high power distance, interdependence, social harmony, and “face” suggest that perceived fairness of *how* services are performed (procedural and interactional justice) would have a stronger effect on Asian consumers’ judgments of service quality, trust, satisfaction, and loyalty than would perceptions of service outcome fairness (distributive justice). However, the differential effects of fairness perceptions may also be context dependent, as suggested by research conducted with Western consumers.

A Model of Service Fairness and Related Determinants of Service Loyalty

The rigorous study of customer loyalty toward service firms has promoted the view that loyalty reflects both an attitudinal component (e.g., beliefs, affect, and intentions) and a behavioral component (e.g., repeat purchasing and word of mouth) (Oliver 1999; Pritchard, Havitz, and Howard 1999). Research on loyalty has trended toward integrative models that account for both evaluative and relational antecedents of the loyalty response (e.g., Aurier and Siadou-Martin 2007; Han, Kwortnik, and Wang 2008; Harris and Goode 2004). We take this perspective in presenting a theory-driven model of service fairness and loyalty

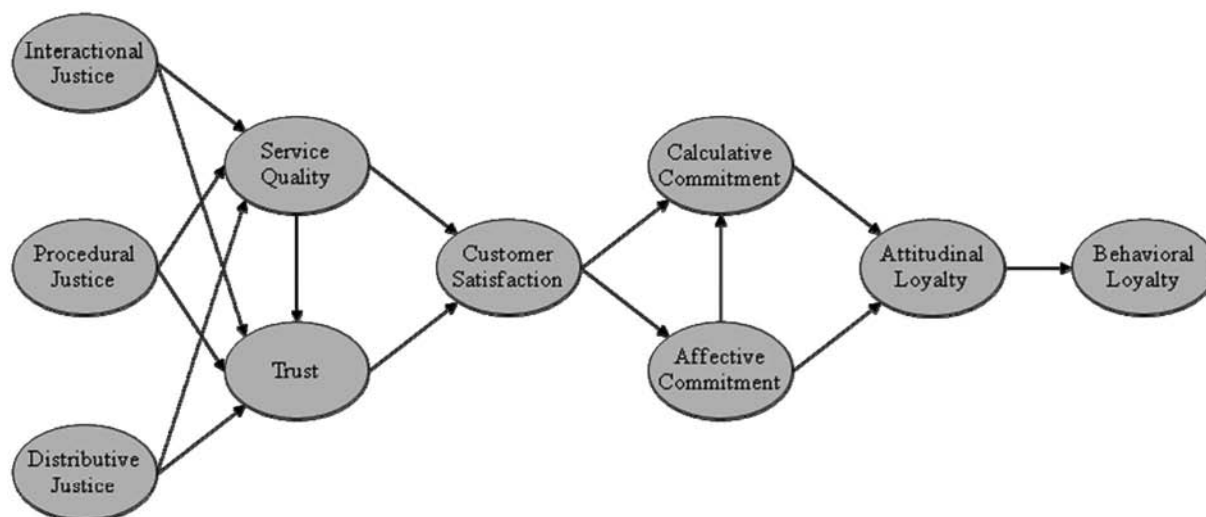
that applies a cumulative, rather than transactional, view of loyalty formation over the course of the service relationship (Olsen and Johnson 2003).

We conceptualize service loyalty as a judgmental and behavioral process that begins with a guest’s service experience and consequent *service fairness* evaluation of what is right or deserving in the service exchange across distributive, procedural, and interactional dimensions. We expect that customers who feel fairly treated by a service provider will evaluate the overall degree of excellence of the service itself—the *service quality*—more positively, all else equal (Aurier and Siadou-Martin 2007; Brady and Cronin 2001; Schneider and White 2004). We further expect positive service fairness and quality perceptions to foster *trust* or confidence in the firm to reliably deliver on service promises (Garbarino and Johnson 1999; Tax, Brown, and Chandrashekar 1998). Although the causal relationships between these constructs have received little attention in the literature, we draw on the recent work of Aurier and Siadou-Martin (2007) and our own prior work with Chunxiao Wang (Han, Kwortnik, and Wang 2008) for the fairness–quality–trust structure that anchors the front end of our model in Exhibit 1.

Consistent with a dynamic view of loyalty, we propose that emergent perceptions of service fairness, service quality, and trust will lead to *cumulative customer satisfaction*, which reflects a customer’s summary judgment of the firm’s success in providing desired experiences over the life of an exchange relationship (Oliver 1997). Cumulative customer satisfaction plays a central role in loyalty models (Butcher, Sparks, and O’Callaghan 2001; Hennig-Thurau, Gwinner, and Gremler 2002; Johnson and Gustafsson 2000). Although service quality and customer satisfaction are related, service quality is a customer’s evaluation of the service itself, whereas satisfaction is a more holistic appraisal of the fulfillment of needs (Oliver 1997). Not surprisingly, then, service quality evaluations are typically cast as antecedent to customer satisfaction (Butcher, Sparks, and O’Callaghan 2001). In our service fairness and loyalty model, cumulative customer satisfaction also mediates the effects of trust on loyalty (Han, Kwortnik, and Wang 2008; Harris and Goode 2004) based on the idea that trust that develops over multiple service exchanges reduces the perceived risk and uncertainty inherent in service.¹ Customer satisfaction does not reduce uncertainty; rather, satisfaction is the outcome of an evaluative process. In cases where service performance falls short of expectations, customers may nevertheless stay in the relationship because of attitudinal inertia fostered by trust (Garbarino and Johnson 1999; Gwinner, Gremler, and Bitner 1998).

Cumulative customer satisfaction is a prerequisite for future service-patronage intentions; satisfied customers are more motivated to maintain and strengthen bonds with the service firm—to exhibit *commitment* (Gustafsson, Johnson, and Roos 2005). Consistent with research showing that customer satisfaction involves a cognitive and utilitarian

Exhibit 1:
A conceptual model of service fairness and loyalty



evaluation and an emotional and hedonic response (cf. Oliver 1997), we propose in the service fairness and loyalty model that satisfaction will influence calculative and affective dimensions of commitment (Fullerton 2003; Gustafsson, Johnson, and Roos 2005). *Calculative commitment* reflects beliefs about the value delivered in a service relationship, whereas *affective commitment* reflects emotional attachment and self-firm connection (Fullerton 2003; Gustafsson, Johnson, and Roos 2005; N'Goala 2007). Given the relational quality typical of service, we expect affective commitment to enhance calculative commitment as customers weigh their attachment to the firm as a benefit of the relationship (Han, Kwornik, and Wang 2008); thus, cumulative customer satisfaction will also influence calculative commitment indirectly through affective commitment.

Finally, we expect customer satisfaction and commitment to directly influence *attitudinal loyalty*, with consequent effects on *behavioral loyalty* (Blodgett, Hill, and Tax 1997; N'Goala 2007). The relationship between satisfaction and loyalty is well founded in the literature (Cronin, Brady, and Hult 2000; Hennig-Thurau, Gwinner, and Gremler 2002), though a variety of factors affect this relationship (Seiders et al. 2005). As illustrated in the model, we expect commitment to mediate the effects of customer satisfaction on loyalty (Fullerton 2003; Garbarino and Johnson 1999; Johnson, Hermann, and Huber 2006). Customers who develop commitment to a service will feel greater involvement with the firm and possess positive beliefs, feelings, and motivation associated with loyalty—notably through

repeated purchases. In short, the formation of such attitudinal loyalty is the precursor to behavioral loyalty, in particular the “true or ‘intentional’ loyalty” that drives brand equity (Day 1969; Oliver 1997).

In sum, consumers expect fair treatment in exchanges with service providers and assess fairness in terms of service outcomes, procedures, and interactions. Given the relatively high social content of lodging service, which involves high customer contact and relies on employees (Bowen 1990; Lovelock 1983), we expect outcome and interactional fairness perceptions to exert more influence on service loyalty than procedural justice does. To examine this expectation, we compared the hotel service to mobile phone service, which has a relatively low social content (moderate customer contact and employee importance for service delivery). We expected outcome and procedural fairness to exert relatively more influence on service loyalty for mobile service.

Research Methods

We asked managers at six hotels to identify repeat guests who were staying at their hotels, three two-star hotels in Yan'An and three four-star hotels in Guangzhou. The hotels were selected because we had management contacts who could assist with data collection. We note that because of a coding oversight, data from the different hotel categories were combined for analysis. Inviting one customer out of five repeat guests to participate in the study, we received 601 completed forms from the 800 surveys that were

Exhibit 2: Descriptive Statistics for Hotel Sample

Variable	Mean	SD	α	IJ	PJ	DJ	SQ	TR	CS	AC	CC	AL	BL
Interactional justice (IJ)	5.765	1.036	0.82	0.69	0.61	0.35	0.34	0.28	0.07	0.29	0.08	0.06	0.00
Procedural justice (PJ)	5.623	1.013	0.75	0.78	0.61	0.52	0.31	0.25	0.07	0.25	0.10	0.05	0.00
Distributive justice (DJ)	5.629	1.038	0.76	0.59	0.72	0.61	0.30	0.18	0.05	0.24	0.16	0.04	0.01
Service quality (SQ)	5.581	1.040	0.71	0.58	0.56	0.55	0.54	0.30	0.11	0.30	0.12	0.11	0.01
Trust (TR)	5.663	0.981	0.77	0.53	0.50	0.42	0.55	0.63	0.08	0.35	0.12	0.10	0.01
Customer satisfaction (CS)	5.607	1.001	0.76	0.26	0.27	0.23	0.33	0.28	0.62	0.17	0.29	0.17	0.03
Affective commitment (AC)	5.666	0.931	0.70	0.54	0.50	0.49	0.55	0.59	0.41	0.52	0.34	0.16	0.02
Calculative commitment (CC)	5.586	0.964	0.77	0.29	0.32	0.40	0.35	0.35	0.54	0.58	0.63	0.16	0.03
Attitudinal loyalty (AL)	5.616	0.912	0.88	0.25	0.24	0.21	0.34	0.31	0.41	0.40	0.40	0.81	0.10
Behavioral loyalty (BL)	5.544	0.976	0.79	0.05	0.08	0.10	0.07	0.11	0.17	0.16	0.18	0.31	0.68

Note: α is composite reliability; left of the diagonal (bolded) is the correlation matrix; the value on the diagonal is the average variance extracted; right of the diagonal is ϕ^2 .

personally distributed by hotel staff (response rate: 75.1%).² We used the same systematic sampling procedure for mobile phone service by asking a manager of a mobile phone company in Guangzhou to give a survey to every fifth customer. We received a similarly strong response rate (76.8%), or 461 of 600. All participants in the study were Chinese.

Measures

We measured constructs in the service fairness and loyalty model with a cross-sectional survey containing multiple-item scales adapted from the literature (see the appendix) that we had tested in prior research (see Han, Kwortnik, and Wang 2008), and we analyzed the data with structural equation modeling. To assess face and construct validity, a convenience sample of 156 hotel guests pretested the survey. After factor analysis, we deleted items with loadings less than 0.30. To reduce the number of estimated coefficients and to increase indicator reliability, we split the items of each construct into two groups and took the means as indicators of each construct (Sweeney, Soutar, and Johnson 1999). (See Exhibit 2 for descriptive statistics and a correlation matrix.)

Empirical Results and Implications

Using the maximum likelihood procedure in LISREL 8.72, we performed a battery of standard tests and analyses for latent-factor models (see the appendix). After testing, we revised the model to include a method factor to control for potential common method bias. Confirmatory factor analysis and a second-order factor analysis of the service fairness dimensions showed that the model's fit to the data is acceptable, and factor loadings indicate that the three justice dimensions are subfactors of service fairness. Thus, the measurement model is supported (see Exhibit 3).

To examine the proposed relationships in the service fairness and loyalty model, we estimated a structural equation model, again with a good fit of the model to the data. Variances in the endogenous constructs explained by the model are high. All of the model paths are significant except two: procedural justice to trust and affective commitment to attitudinal loyalty (see Exhibit 4). The model's standardized path estimates support the proposed decision process that integrates evaluative judgments (e.g., service quality and customer satisfaction) and relational judgments (e.g., trust and commitment) to produce a loyalty attitude and behavioral response.

Examining the pattern of effects for the service fairness dimensions, consistent with research conducted in the West, distributive justice is positively associated with service quality and (less strongly) with trust. However, the effect of distributive justice on trust is largely indirect and is mediated by service quality. Just 37.1 percent of the total effect is direct. The role played by procedural justice is muted; although the relationship between procedural justice and service quality is significant, the path is relatively weak, and the path between procedural justice and trust is not significant.

The path between interactional justice and service quality is significant and positive. More important, the relationship between interactional justice and trust is the strongest of the fairness dimensions. Analysis shows that unlike the effect of distributive justice, 61 percent of the total effect of interactional justice on trust is direct. Although distributive justice has the strongest effect on service quality, interactional justice has the strongest effect on trust. Furthermore, analysis of the total effects of the service fairness dimensions on the model's endogenous constructs shows that distributive justice has the largest effect on the service loyalty system overall in the lodging context, followed by interactional justice, with procedural justice exhibiting considerably less influence.

Exhibit 3:
Service fairness and loyalty analytic model

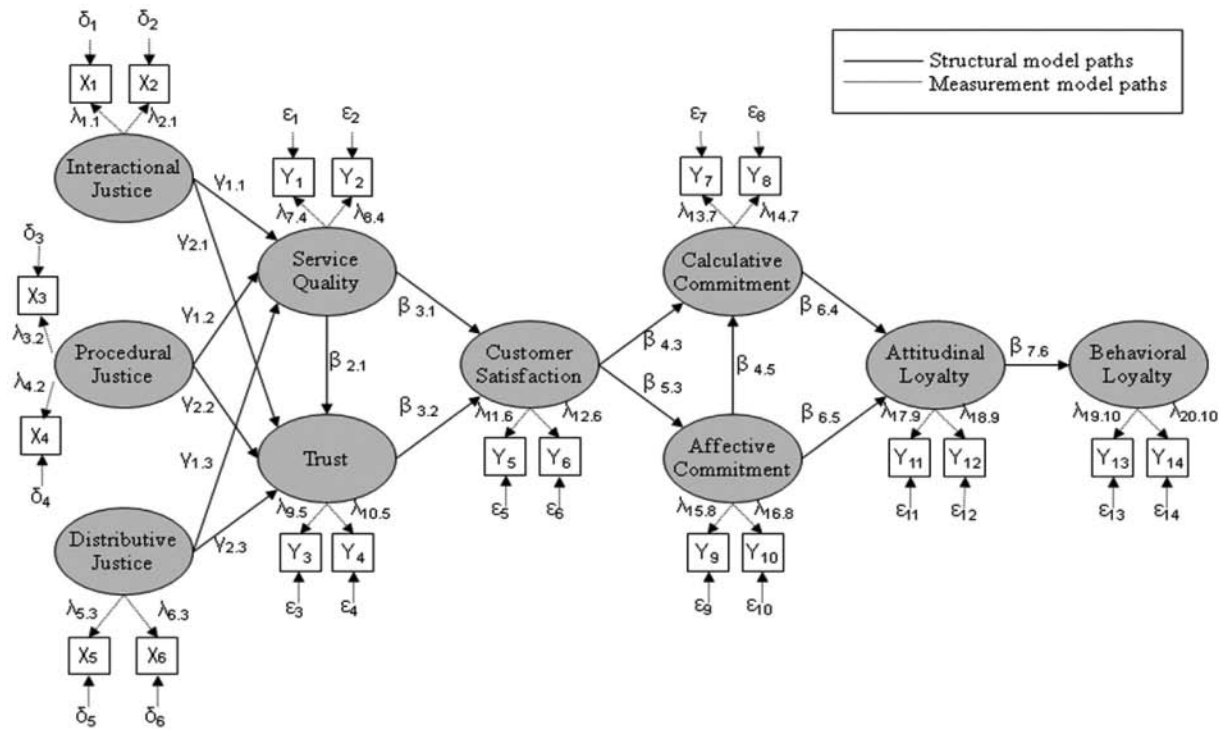


Exhibit 4:
Service Fairness and Loyalty Structural Equation Model Results

Relationship	Path	Hotels	Mobile Phone
Interactional justice → service quality	$\gamma_{1.1}$	0.32/4.32**	0.33/3.93**
Procedural justice → service quality	$\gamma_{1.2}$	0.17/1.97*	0.27/2.24*
Distributive justice → service quality	$\gamma_{1.3}$	0.42/6.02**	0.28/3.51**
Interactional justice → trust	$\gamma_{2.1}$	0.25/4.05**	NS
Procedural justice → trust	$\gamma_{2.2}$	NS	0.29/3.35**
Distributive justice → trust	$\gamma_{2.3}$	0.13/1.97*	0.23/2.86**
Service quality → trust	$\beta_{2.1}$	0.52/6.93**	0.37/5.30**
Service quality → customer satisfaction	$\beta_{3.1}$	0.33/4.18**	0.29/3.28**
Trust → customer satisfaction	$\beta_{3.2}$	0.32/4.95**	0.29/3.25**
Customer satisfaction → calculative commitment	$\beta_{4.3}$	0.58/11.74**	0.26/3.81**
Customer satisfaction → affective commitment	$\beta_{5.3}$	0.28/5.80**	0.76/16.86**
Affective commitment → calculative commitment	$\beta_{4.5}$	0.46/9.46**	0.57/4.49**
Calculative commitment → attitudinal loyalty	$\beta_{6.4}$	0.91/26.35**	0.42/4.24**
Affective commitment → attitudinal loyalty	$\beta_{6.5}$	NS	0.49/4.02**
Attitudinal loyalty → behavioral loyalty	$\beta_{7.6}$	0.82/23.13**	0.87/15.99**

Notes: Statistics are standardized path coefficients and t values.
* $p < .05$, ** $p < .01$.

Exhibit 5:
Total Effects of the Three Justice Dimensions on Endogenous Factors in the Service Fairness and Loyalty Model

	Service Quality	Trust	Customer Satisfaction	Affective Commitment	Calculative Commitment	Attitudinal Loyalty	Behavioral Loyalty
Hotel study							
Interactional justice	0.32/4.32**	0.41/6.33**	0.24/5.15**	0.33/5.84**	0.29/5.57**	0.27/5.59**	0.22/5.47**
Procedural justice	0.17/1.97*	0.09/2.00*	0.09/2.03*	0.11/2.15*	0.10/2.64**	0.09/2.62**	0.08/1.98*
Distributive justice	0.42/6.02**	0.35/5.42**	0.45/7.78**	0.39/7.20**	0.44/7.79**	0.40/7.84**	0.33/7.51**
Mobile phone study							
Interactional justice	0.33/3.93**	0.12/3.09**	0.13/3.07**	0.10/3.01**	0.13/3.29**	0.10/3.19**	0.09/3.15**
Procedural Justice	0.27/2.24*	0.39/4.25**	0.41/5.40**	0.31/5.57**	0.32/4.91**	0.29/5.35**	0.25/5.24**
Distributive Justice	0.28/3.51**	0.33/3.96**	0.17/3.77**	0.13/3.66**	0.16/3.87**	0.13/3.77**	0.11/3.70**

Notes: Statistics are standardized coefficients and t values.

* $p < .05$, ** $p < .01$.

Mobile Phone Comparison

When we replicated the analysis for the mobile phone data, we again found that the measurement model and structural equation model estimation indicated a good fit of the model to the data. Variances in the model's constructs are again high, though lower than for the hotel model, except for behavioral loyalty. Such results make sense, given that it is easier for consumers to switch hotel providers than mobile phone vendors. All of the relationships proposed in the structural model are significant except the path from interactional justice to trust (see Exhibit 4). Again we find that distributive justice is positively associated with service quality and with trust, but for mobile phones much of the effect of distributive justice on trust is direct (69.7%). Compared to hotels, procedural justice plays a more important role for mobile phones. The effect of procedural justice on service quality is significant, as is the path between procedural justice and trust. Although the path between interactional justice and service quality is significant and positive, interactional justice has no effect on trust for mobile phone service—unlike hotels. Analysis of the total effects of the fairness dimensions on the model's endogenous constructs (Exhibit 5) shows that procedural justice has the largest effect on loyalty, with distributive and interactional justice exhibiting much weaker influence.

Theoretical Implications of the Service Fairness and Loyalty Model Tests

Our model highlights the different effects of distributive, procedural, and interactional justice in service contexts.

Analysis supports the model's structure and shows that fairness perceptions, service quality, trust, cumulative customer satisfaction, and commitment explain considerable variance in attitudinal and behavioral loyalty. An important conclusion we draw from our findings is that the process of fostering service loyalty is complex, and it is influenced both by the outcomes of service exchanges and customers' perceptions of the fairness of these exchange outcomes.

Overall, our results offer solid support for the idea that consumers commonly assess the fairness of exchanges with service providers. In these two studies, we find that twenty-seven of thirty expected relationships in the model are significant. Our research supports the multidimensionality of service fairness and the relative influence of different justice perceptions on the formation of service loyalty (Patterson et al. 2006; Smith, Bolton, and Wagner 1999). With regard to hotel loyalty, we find that perceptions of distributive and interactional justice are more important than procedural justice. By comparison, procedural justice is more important than the other two types of justice for loyalty formation for mobile phone providers. In light of the relatively higher level of social content in hotels (i.e., customer-contact levels and the importance of employees in service performance), it makes sense that consumers would ascribe particular weight to having their needs met for the price paid and to the quality of interactions with service employees (e.g., rapport, courtesy, and respect). Thus, although we find that perceptions of service fairness matter for loyalty formation in both of two different services, the fact that the relative influence of service fairness dimensions differs between these two services is an important finding.

The Influence of Culture on Service Fairness Perceptions

We know that cultural values influence the way consumers perceive equity in service exchanges. In particular, the Chinese put more emphasis on social equity than on outcome equity (e.g., Hui and Au 2001; Mattila and Choi 2006). Our findings underscore the importance of perceived fairness in service performance. For hotels, this means interactional justice and for mobile phones, procedural justice. Having said that, there is no reason to conclude that these effects depend entirely on culture. They are just as likely to be a result of the types of service we studied. Based on research of Western consumers, we would expect interactional justice to play a larger role for hotel loyalty, because of the relatively high customer contact and reliance on employees for service delivery. Likewise, we would expect procedural justice to play a larger role for services such as telecommunications that do not rely heavily on employees for service delivery. In contrast to what has been reported in other studies, our research finds the same influences for Chinese customers. Moreover, the fact that distributive justice was the fairness dimension that had the largest total effect on service loyalty in the hotel model indicates that Chinese consumers do attend to outcome-based equity and fair value in service exchanges as would Western consumers.

Managerial Implications for Hospitality

The results of our analysis show that the effects of service fairness dimensions on customer loyalty depend on the type of service. For the Chinese hotel guests that we studied, customer perceptions of distributive justice (service outcome) and interactional justice (service performance) exert a larger effect on service loyalty than do perceptions of procedural justice (service process). These findings suggest the key drivers of fairness that should occupy managers' attention and organizational action. Since most lodging firms rely on customer contact and employee service performance, managers should focus not only on expected outcomes (e.g., offering a clean, comfortable room and competitive amenities at a fair price) but also on the nature of service encounters between guests and employees, because these interactions probably will determine guests' perceptions of interactional justice. This finding explains why simply fulfilling service promises is not a guarantee of guest satisfaction and loyalty.

Satisfaction and loyalty also depend on *how* service promises are fulfilled. Having said that, we do not argue that procedural fairness should be ignored, given that procedural fairness—fair processes, rules, and practices—still mattered to our respondents. It just did not have as strong an effect as interactional justice did. As hospitality consultant

William F. Orilio (2004) aptly stated, "The importance of customer service is forever clear: even the most delicious lobster isn't good when service is poor, because poor service leaves a bad taste in your mouth."

Along the same line, when service failure occurs and a hotel mounts a recovery effort, the tendency is to offer compensation (e.g., free goods or discounts). However, given the importance of interactional justice, a more context- and situation-specific response (e.g., a personal apology for rude or unfair personal treatment) is more likely to enhance customer satisfaction, not to mention being potentially more cost-effective. Our findings also suggest that employees need to be trained to understand and recognize the different sources of service fairness—both as delivered (e.g., a room-service meal delivered with a smile) and as perceived by customers (i.e., as a fair outcome and appropriate interaction). Managers should underscore the relationships between customer fairness perceptions and consequent evaluations of service quality, trust, satisfaction, commitment, and loyalty. More to the point, lodging employees need to understand that even if they operate according to standard procedure and even if the outcome is fair, the guest's trust in the operation depends most strongly on their perception of fair treatment by and communications with employees—the "people" dimension of the service mix.

Another important managerial implication of this research is that hospitality firms should measure guests' fairness perceptions according to justice dimensions—something that firms rarely do (Smith, Bolton, and Wagner 1999). The multi-item scales that we used here are a starting point for assessing guests' fairness perceptions. Such a survey could supplement or replace the typical guest survey that asks about overall guest satisfaction as well as satisfaction with specific service elements (e.g., housekeeping, room service, dining options). This type of survey provides at best an incomplete picture of the determinants of loyalty. Measuring and tracking guests' perceptions of service fairness in terms of outcomes, procedures, and interactions can provide a more nuanced understanding of what satisfies a particular hotel's guests and encourages their loyalty.

Research Limitations and Future Directions

Future research should test our model of service fairness and loyalty in different countries and cultures to validate the generalizability of the model's constructs and relationships. There is no obvious reason to think that the Chinese respondents in our study differ substantially from Western consumers, but it is worth investigating that question. The study could also be extended to additional types of service—including restaurants, spas, and cruise lines.

As we mentioned at the outset, we inadvertently commingled the data from two-star and four-star hotels. We have no reason to think that this affects our findings, but it

is possible that customers of two-star hotels respond differently on the loyalty dimensions than do those of four-star hotels. Indeed, the strong support for our model despite the confounding of data would seem to indicate that quality tier does not moderate the influence of service fairness perceptions on lodging loyalty. Nevertheless, our findings may not be generalizable beyond the two-star and four-star lodging properties we studied. Future research is needed to explore possible moderating effects of service fairness and loyalty, such as individual customer differences (e.g., business vs. leisure) or differences in lodging type (by quality tier or location). Finally, our research is also limited by a cross-sectional design and correlational data, which prohibits causal inferences. Research that uses a longitudinal design would better capture the cumulative and dynamic nature of loyalty formation.

In general, research is needed to better understand fairness perceptions in hospitality. The social and personal nature of many hospitality services—including lodging, dining, and spas—make the interactional-fairness evaluation particularly salient. Although guests might find it difficult to assess service quality because of a vague idea of what defines excellent hospitality, perceptions of fairness in hospitality are based more on intrinsic reference points and a familial notion of care, comfort, courtesy, and respect. Research that better defines hospitality fairness perceptions can help managers to produce experiences that enhance customer satisfaction and consequent loyalty.

Appendix

Survey Instrument

Respondents were asked to choose the number that best described how strongly they agreed with each statement (1 = strongly disagree; 7 = strongly agree). For the service quality measure, respondents answered using 7-point semantic differential scales.

Service Fairness (Interactional Justice)

I was treated with courtesy.
 Hotel staff was ready to answer my questions.
 Hotel staff was enthusiastic or eager to resolve my problems.
 Hotel staff did an excellent job building rapport with me.
 I was treated with respect.

Service Fairness (Procedural Justice)

I received service in a very timely manner.
 The service procedures of the hotel were reasonable.
 Hotel staff provided me with information that was clear and understandable.

Hotel staff seemed very knowledgeable about any of my questions or concerns.
 Hotel staff treated me flexibly according to my needs.

Service Fairness (Distributive Justice)

The hotel has fully met my needs.
 The hotel served me correctly.
 The hotel provided me with what I asked.
 The price of the hotel was reasonable for the service I received.

Service Quality

(Please evaluate the hotel's service quality along the following dimensions)
 Service reliability: 1 = very unreliable to 7 = very reliable
 Service individuation: 1 = very standard to 7 = very individualized
 Service professionalism: 1 = very unprofessional to 7 = very professional
 Service speed: 1 = very slow to 7 = very fast
 Service facilities: 1 = very dated to 7 = very advanced
 Staff appearance and manner: 1 = very inappropriate to 7 = very appropriate
 Staff interest and caring: 1 = very little to 7 = very much
 Overall service quality: 1 = poor to 7 = excellent

Trust

This hotel is trustworthy because it is concerned with the customer's interests.
 This hotel treats customers with honesty.
 This hotel has the ability to provide for my needs.
 I trust and am willing to depend on this hotel.

Satisfaction

I am satisfied with my experiences in this hotel.
 I have had pleasurable stays in this hotel.
 I am satisfied with this hotel overall.
 My experiences at this hotel have exceeded my expectations.
 It was wise of me to stay at this hotel.

Affective Commitment

I identify with this hotel very much.
 I feel like "part of the family" at this hotel.
 I feel "emotionally attached" to this hotel.
 I feel happy being a customer of this hotel.
 I feel a strong sense of belonging to this hotel.

(continued)

Appendix (continued)

Calculative Commitment

- I have received more benefits in this hotel than in other hotels of this city.
- Compared with this hotel, it would be too costly for me to stay at other X-star hotels.
- It is more convenient for me to stay at this hotel than at other X-star hotels in this city.
- I would not receive the same treatment in other X-star hotels that I receive in this hotel.
- I have few hotel options in this city that I would consider other than this hotel.

Attitudinal Loyalty

- I consider this hotel my first choice when I need lodging services in this city.
- I consider this hotel my primary hotel when I stay in this city.
- The service of this hotel is better than that of other X-star hotels in this city.
- I am willing to pay more to be a guest at this hotel than at other X-star hotels in this city.
- I like staying at this hotel very much.
- To me, this hotel is the one I enjoy the most in this city.
- Compared with other X-star hotels, I prefer this hotel more.
- This hotel is the one that I appreciate most in this city.
- I intend to stay at this hotel again when I am in this city.
- I intend to recommend this hotel to others.
- I intend to say good things about this hotel to others.
- I intend to give feedback to this hotel so that it can improve its service quality.

Behavioral Loyalty

- When I come to the city, I stay at this hotel.
- Compared with other hotels, I have spent more money at this hotel.
- Compared with other hotels in this city, I have stayed more at this hotel.
- Compared with other hotels in this city, I have used more of the services offered at this hotel.

Model Tests

Hotel analysis. We first tested for common method variance resulting from our use of cross-sectional surveys. Applying the procedure advocated by Podsakoff et al. (2003), we found that common method variance was present, so we included a method factor in all analyses to control for potential bias. We next performed a normal

transformation with PRELIS 2 because some constructs had non-normal distributions. Estimates of Cronbach's alpha were larger than 0.85 for each construct, indicating high internal consistency and reliability of the measures. Statistics for the measurement model show a good fit to the data: normed fit index (NFI) = 1.00, comparative fit index (CFI) = 1.00, goodness-of-fit index (GFI) = 0.99, adjusted goodness-of-fit index (AGFI) = 0.96, relative fit index (RFI) = 0.99, root mean square residual (RMR) = 0.012, root mean square error of approximation (RMSEA) = 0.022, $\chi^2=138.70$ ($df=105$).

We performed confirmatory factor analysis using the covariance matrix as the input matrix to examine the model's constructs and measures. Significant factor loadings for the construct indicators (t values ranged from 2.87 to 17.96) suggested that convergent validity was acceptable for all constructs. Composite alpha ranged from .70 to .88 (see Exhibit 2) and average variance extracted exceeded the .50 threshold (Bagozzi and Yi 1988), indicating construct reliability. Average variance extracted for each construct was greater than the shared variance between construct pairs (ϕ^2), supporting the discriminant validity of the model's constructs (Fornell and Larcker 1981).³ Finally, we performed a second-order factor analysis of the service fairness dimensions. The fit of the model was acceptable, NFI = 1.00, CFI = 1.00, GFI = 1.00, AGFI = 0.98, RFI = 1.00, RMR = 0.008, RMSEA = 0.024, $\chi^2 = 7.97$ ($df = 6$) and factor loadings of the three justice dimensions with service fairness were all significant, with t values ranging from 21.85 to 23.98.

Using the maximum-likelihood procedure in LISREL 8.72, we estimated a structural equation model to examine the relationships in the service fairness and loyalty model. Results indicate a good fit of the model to the data (NFI = 0.99, CFI = 1.00, GFI = 0.96, AGFI = 0.95, RFI = 0.99, RMR = 0.023, RMSEA = 0.032, $\chi^2 = 224.02$ ($df = 137$)). Variances in the endogenous constructs explained by the model are high: service quality = 0.74, trust = 0.71, customer satisfaction = 0.64, affective commitment = 0.83, calculative commitment = 0.98, attitudinal loyalty = 0.83, behavioral loyalty = 0.67.

Mobile phone analysis. We again tested and corrected for potential bias due to common method variance, as well as for non-normal distributions. The measurement-model showed a good fit to the data in support of our conceptualization of the role of service fairness in the loyalty system: NFI = 0.99, CFI = 1.00, GFI = 0.97, AGFI = 0.93, RFI = 0.99, RMR = 0.013, RMSEA = 0.036, $\chi^2 = 166.67$ ($df = 105$). Confirmatory factor analysis revealed significant loadings for the construct indicators (t values from 4.14 to 19.76) and acceptable convergent validity for all constructs. Composite alpha ranged from .83 to .92 and average variance extracted exceeded the .50 threshold, indicating construct reliability.⁴ Average variance extracted for each construct was

greater than the shared variance between construct pairs, indicating discriminant validity of the model's constructs. Second-order factor analysis again showed that the three justice dimensions are subfactors of service fairness: factor loadings of the three justice dimensions with service fairness were all significant, with t values ranging from 14.65 to 21.25.

Results of structural equation model estimation indicated a good fit of the model to the data (NFI = 0.99, CFI = 1.00, GFI = 0.94, AGFI = 0.91, RFI = 0.98, RMR = 0.024, RMSEA = 0.049, $\chi^2 = 282.79$ ($df = 137$)). Variances in the endogenous constructs explained by the model are service quality = 0.63, trust = 0.65, customer satisfaction = 0.54, affective commitment = 0.58, calculative commitment = 0.77, attitudinal loyalty = 0.76, behavioral loyalty = 0.76.

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Notes

1. There is debate in the literature about the structure of the satisfaction–trust relationship (Garbarino and Johnson 1999). Some scholars posit the reverse causal sequence rather than that proposed in our model, with the satisfaction judgment influencing trust in the firm, especially for *transaction* satisfaction based on one exchange with a service provider and for which trust in the firm would be less likely to yet exist (Agustin and Singh 2005). However, we define customer satisfaction in our model as a cumulative judgment and instead ascribe to the theoretical position that trust affects this summary evaluation of exchanges with the service firm over the life of the relationship.
2. The high response rates can be attributed to close personal relationships between one of the study's authors and personnel at the sampled sites who facilitated data collection.
3. The procedural–interactional justice ϕ^2 was rounded up from 0.608 to 0.61; the AVE was rounded down from 0.614 to 0.61. While the higher AVE is indicative of discriminant validity, the near equivalence of these statistics and the high correlation of 0.78 between procedural and interactional justice reveals

considerable shared variance between these dimensions in the hotel context.

4. Descriptive statistics for the mobile phone sample are available from the authors.

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Bios

Robert J. Kwortnik, Jr., is an associate professor of marketing at the Cornell University School of Hotel Administration. **Xiaoyun Han** is an associate professor of marketing at the School of Business, Sun Yat-Sen University, Guangdong, China.