Restaurant Service Failure Recoveries: Role Expectations of Customers

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Abstract

This research explores service failure recovery strategies that restaurant customers most expect in order to create a consumer-centered typology of failure types and the expected roles of the service provider in attempting a recovery. Findings indicate that consumers classify recovery strategies into three categories of human intervention, monetary incentives, and no response. Any recovery attempt is far more beneficial than none. Human intervention is expected from the service provider when the failure is part of the core service product while monetary incentives are expected when the failure is peripheral to the core product. Usefulness of role theory in service encounters is discussed and implications for restaurant service providers are included.

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Write Injuries in Dust, Benefits in Marble.
Benjamin Franklin

The most serious of restaurant service failures are difficult to overcome and have the potential to drive customers away, yet everyday errors though, less catastrophic, may be no less important. The full range of service errors deserves our attention since it is these errors that inform consumers' overall attitudes toward a restaurant. Not formed in a single surprising encounter, but over a number of visits, customers have expectations about how such service errors should be addressed. Rather than broadly declaring that service errors should be avoided, knowing which recoveries are expected by customers when errors do occur can have the dual benefit of improving the customers' attitude while also avoiding more costly solutions that may not fulfill expectations.

Research into restaurant service failures tends to over sample serious failures since the most egregious service errors are easily remembered by survey respondents. Respondents are also likely to justify serious failure scores by giving low recovery satisfaction scores for such errors. Thus, highly serious failures are often reported as less open to recovery strategies. Through a simulation approach, the outcome of all possible recoveries can be evaluated for each service failure, describing the maximum recovery strategy for each failure while also avoiding the inconstancies of sampling involved in memory-based sampling approaches. A more complete and consistent data set can allow exploratory techniques to uncover groupings of failures and the recoveries that consumers expect of service providers for a range of service errors. Employing this approach, the present research attempts to answer the following questions:

1. For what type of service failure is each recovery strategy most suited?

2. For what type of service failure is each recovery strategy least suited?

3. What recovery strategies are perceived by consumers as substitutable?

4. For what type of service failures are groups of recovery strategies suited?

5. Can a simple typology of failure groups and recovery groups be used to create a rule-of-thumb for service employees to deal with real time service failures?

Literature Review

Customers entering a restaurant bring with them both a cumulative level of satisfaction (Johnson and Fornell, 1991) and a specific expectation of service transactions (Cronin and Taylor, 1992). When service failures take place, the responses to customer complaints often reinforce negative feelings created by the errors (Hart, Heskett and Sasser, 1990) changing the perceived value of the transaction and acting as an antecedent to future perceived quality (Bitner, 1990; Bolton and Drew, 1991). Over a number of transactions, consumers will form an overall market-level expectation of their own satisfaction level (Johnson, Anderson and Fornell, 1995). Over the long-term, relationship-based factors, such as trust, can play a role in buyer-seller relationships, reducing transaction costs (Noordewier, John and Nevin, 1990) and even acting as a prerequisite for being considered as a product source (Doney and Cannon, 1997). Service employees, however, must remain concerned with meeting and surpassing customers' expectations in a specific service setting, since it is the specific experience that will influence customers' future restaurant choices. Front line employees respond to errors with recoveries. A recovery is the action taken by a firm in response to defects or failures (Gronroos, 1988) and if done well may even present an opportunity to obtain higher ratings from customers than if the failure had never happened as long as the recovery is effective (Etzel & Silverman, 1981; McCollough

& Bharadwaj, 1992; McDougall and Levesque, 1998; Tax & Brown, 1998). This means that customer satisfaction is still possible, despite service errors.

Satisfaction research has been dominated by the prevailing confirmation/disconfirmation paradigm (Oliver, 1980) and includes variations and extensions into such areas as contrast theory (Cardozo, 1965); assimilation theory (Anderson, 1973), and equity theory (Oliver and Swan, 1989). Quantification of service failures in specific service settings and industries has examined failures from both the customer perspective as well as the service employee perspective (Bitner, Booms and Tetreault, 1990; Bitner,1992; Bitner, Booms and Mohr, 1994; Hoffman, Kelley and Rotalsky, 1995; Kelley, Hoffman and Davis, 1993). The ultimate goal of service firms, in relation to satisfaction, is to retain customers as such a strategy is less costly than attracting new customers (Reicheld, 1996; Sellers, 1989).

Gap research has developed as the main model for understanding how consumers of services are satisfied. When expectations of service are not met, the resulting gap leads to dissatisfaction (Zeithaml et al., 1990). Different types of service failures may actually influence these subjective judgements, meaning that not all service gaps are equally bad. Bitner et al. (1990) examined specific events and behaviors in order to explore the dimensions of satisfaction in the service encounter. Across three industries, hotels, restaurants, and airlines, Bitner et al. (1990) classified all satisfactory and dissatisfactory incidents into three groups. An important finding was that responses to failure incidents, such as apologies, compensatory actions, and explanations, could help lessen the dissatisfaction of customers. Hoffman et al. (1995) applied the Critical Incident Technique (CIT) method, as well as Bitner et al.'s (1990) classification schema, to the restaurant industry in the U.S., finding the service failures that respondents remembered as most serious. Stauss and Mang (1999) followed the same methods for their study on restaurant service failure differentials among different

cultures. Service failures are often followed by recovery attempts on the part of the service provider. Such recovery strategies are well documented as playing an important role in a consumer's final level of satisfaction (Bitner et al., 1990; Hoffman et al., 1995; Kelley et al., 1993). If the service failure is not followed by a recovery attempt, the consumer will lock in the experience (Hart et al., 1990) and evaluate the service relatively low. Although service failure recovery strategies may not be exactly what the customer expects, it may be enough to create satisfaction. Bitner et al. (1990) found that even the simple act of offering an apology can lead to increased satisfaction and overcome many service failures. Yet missing from previous studies is a matching of recoveries to failures that can inform service employees how to react to specific situations. This may be an artifact of the research methods employed when studying restaurant service failures, which often rely on recalling previous experiences.

Measuring Service Failures

The CIT technique, an inductive research method that draws out categories of incidents from interview data, has been widely used in studying the service industry. Developed during World War II, the United States Army Air Forces used the technique in selecting aircrews (Flanagan, 1954). Interviewers may not have the expertise and/or experience to ask just the right questions that get at important, critical, aspects of the topic under study. By letting respondents freely recount the most critical incidents, CIT uncovers important issues that would otherwise be missed. In the service setting, CIT has been very useful in discovering the range of failure and recovery types, but variability in the service encounter makes accurate and detailed measurement difficult, and in many cases respondents may not remember details surrounding a previous service encounter (Walsh, 2000). The CIT method draws out those encounters that are most memorable, but at a price in oversampling the negative aspects of the respondent's experience. Chung, Beth, and Hoffman (1998) found the most serious restaurant failures in their study to have occurred an average of 590 days before the interview. That

serious errors will be retained in customers' memories is undeniable, but the amount of attention such errors require on a daily basis is more open to doubt. Additionally, many CIT studies completely ignore any responses given to the service failure. Since an attempt at recovery is vital to overcoming a failure, it is possible that at least some of the most memorable failures reported in CIT interviews were exacerbated by a lack of or an inappropriate response. When the most serious problems uncovered by the CIT approach are irreversible or even life threatening, such as drug administration (Cheek, 1997), CIT allows managers/administrators to formalize procedures that create a zero-tolerance work environment to avoid the issues uncovered. Rather than a life and death issue, restaurant patrons will perceive a service failure within the context of the service delivery, which by its nature is highly vulnerable to numerous, less serious, failures.

Expected Recoveries: Role Theory

Smith et al. (1999) found that recovery efforts differ in their level of success depending on both the type and severity of the service failure. Failures were modeled as either procedural, involving delivery of the service, or outcome, concerning the core product. McDougall and Levesque (1998) showed that two types of recoveries, compensation (monetary remuneration), and assistance (service provider interaction with customer) were similar in their usefulness but possibly influenced by contextual factors. These recent studies point the possibility that both failures and recoveries are linked in a way that involve role expectations on the part of the customer. Role theory centers on the relationship of context with behavior (Biddle, 1979). The social exchange that takes place in service settings can be understood by examining expected and adopted roles of the participants (Broderick, 1999). Although many different terms have been employed, we will follow Broderick (1999) in using Katz & Kahn's role theory terminology, which included:

> Role set: different people with whom the focal person has contact and who have a stake in, and hold expectations about, the focal person's performance.

Role expectations: the expectations of the role set people of what the focal person should or should not do.
Sent role: the role expectations of the role set are sent to the focal person.
Received role: the perception of what the sent role is.
Received behavior: what the focal person does in response to the received role.

Restaurant service settings are often used in service research due to the high level of experience consumers have eating out. It is clear that such a common behavior would also be accompanied by expectations about the role of the service provider, especially in failures that are common. How many of us have had a drink spilled by a waiter, had to wait too long for an order, or had a meal not cooked to order? The current research attempts to build on service failure research such as CIT-based failure classifications (Hoffman, 1995; Chung & Hoffman, 1998) by emphasizing the importance of recovery strategies (McDougall & Levesque, 1998; Smith et al., 1999) as involving role expectations that depend on the specific failure type.

Method

Since the use of scenarios has the advantage of overcoming the biases associated with memory-based survey approaches, an extensive effort was made to assure that service scenarios used in this study followed the possible failures encountered by members of the sampling frame. Internet-based sampling was chosen and also tested for its comparative validity with face-to-face interviews. Two rounds of pre-testing addressed these concerns and resulted in a Web-based survey that presented respondents with a full range of recovery strategies to each service failure. Factor analysis was used to reduced the recovery strategies to three categories. These recovery categories were then used with chi-squared automatic interaction detector (CHAID) analysis to describe how failure types and seriousness scores combined in resulting recovery satisfaction scores. CHAID classifies categorical data by splitting a group into segments that differ significantly in respect to a dependent variable based on interaction effects. Resulting segments are mutually exclusive and exhaustive and the attributes of the

segments can be used as predictors in the model. CHAID's resulting categories are presented in an easy to interpret tree diagram with each node of the tree representing a subgroup of the sample and the root node containing the whole sample. Under the root node, the next level of the tree is divided by the best predictor of the dependent variable, which can be further divided.

Pre-testing

The first pre-testing stage employed CIT interviews to describe failures in a similar method to Hoffman et al. (1995) and Chung and Hoffman (1998). Interviews, which were recorded and later analyzed, averaged 25 to 30 minutes and were usually conducted in public locations, always interviewing ethnic Chinese, employing an intercept method. A total of 342 interviews were conducted, resulting in 684 critical incident reports (half positive outcomes and half negative outcomes). A deductive process of grouping was completed, following the approach of Bitner et al. (1990). A total of 13 failure categories and nine recovery strategies were found. Eleven of the failures and eight of the recoveries perfectly aligned with the Hoffman et al. (1995) published results. The additional categories, not found in previous studies, were the failures spillage of liquid (liquid from serving plates), served out of order (patrons arriving at a later time being seated or served ahead of respondent) and the recovery blame customer (a recovery strategy). These three categories possibly reflect differences in dining between cultures, as liquids play an important role Chinese dining. The new categories were included in a follow-up pre-test.

A second pre-test employed a survey instrument created to run on a Web site. This hybrid survey was completed over the Internet and included a CIT approach but in place of interviews allowed respondents to type their experiences. A similar approach was implemented by Meuter et al. (2000). Results confirmed that online responses showed similar failure types and frequencies of reporting as the earlier interview technique. This confirmed that the sample frame of Internet users did not exhibit

significant differences in restaurant service failure and recovery experience and that the Internet sampling approach obtained similar results to traditional interviewing approaches.

Sample

Failure types and recovery strategies reported in the first two pre-tests were converted to scenarios with one failure described on a Web page and all recovery strategies listed bellow it. Respondents first rated the seriousness of the failure and then rated each recovery strategy for the specific failure (both using a seven-point scale). When complete, the next failure and the accompanying recoveries were displayed and rated by the user. This process was repeated until all failures had been viewed. Both the failure types and the matching recoveries were randomized in presentation order.

As in the pre-testing stage, respondents were drawn to the Web site through advertisements placed on local Web portals sites. A total of 547 participants completed the online survey. Fifty-six percent of respondents were female with an mean age of 27, averaging a monthly income of NT$34,000 a month, 21 percent married, and 66 percent with a university undergraduate degree.

Results

Overall failure seriousness and recovery ratings can be seen in Table 1 where higher failure scores represent increased seriousness of the failure and higher recovery scores represent increased levels of satisfaction. Generally, service error patterns of seriousness follow previous findings with the exception of the *out of stock* error. The out of stock error Chung and Hoffman (1998) and Hoffman et al. (1995) found to be one of the most serious failures was here found to be one of the least serious. This first finding informs us exactly how important the setting variables are in informing the role of the service provider and customer during the encounter. Since Chinese food rarely depends on one single

main course, the absence of one item from the menu is quite a frequent occurrence. This causes little trouble, since the normal Chinese meal is made up of many dishes, all independent of each other. An out of stock dish is most often replaced by another dish on the menu. Thus, waiters often recommend other dishes, reduce prices, or make small refunds if the customers finds the missing dish important to the meal.

Table 1. Failure and recovery ratings

	Failure seriousness	Free food	Discount	Coupon	Mgt. intervention	Replacement	Correction	Apology	Do Nothing
Product defect	6.58	2.91	2.98	3.16	3.94	4.32	3.69	3.03	1.26
	(1.19)	(1.84)	(1.88)	(1.91)	(2.03)	(2.14)	(2.09)	(1.85)	(.98)
Slow service	5.6	4.36	4.72	4.73	4.72	4.15	4.56	4.17	1.44
	(1.32)	(1.70)	(1.63)	(1.65)	(1.59)	(1.77)	(1.64)	(1.60)	(1.10)
Facility problem	5.72	3.84	4.09	4.10	4.68	3.70	4.71	3.95	1.51
	(1.41)	(1.76)	(1.72)	(1.77)	(1.68)	(1.79)	(1.73)	(1.65)	(1.15)
Unclear policy	4.44	4.36	4.69	4.57	4.83	4.03	4.65	4.28	1.77
	(1.67)	(1.79)	(1.69)	(1.75)	(1.63)	(1.80)	(1.68)	(1.69)	(1.39)
Out of stock	3.74	4.73	5.12	5.27	5.04	4.84	4.72	4.51	2.03
	(1.68)	(1.66)	(1.55)	(1.56)	(1.54)	(1.65)	(1.63)	(1.63)	(1.43)
Served out of order	5.66	4.28	4.65	4.55	4.72	4.07	4.61	4.09	1.45
	(1.36)	(1.66)	(1.65)	(1.71)	(1.69)	(1.73)	(1.70)	(1.66)	(1.08)
Not cooked to order	5.08	4.22	4.53	4.65	4.78	5.71	5.26	4.02	1.55
	(1.54)	(1.73)	(1.63)	(1.69)	(1.65)	(1.53)	(1.60)	(1.64)	(1.24)
Seating problem	6.3	3.68	4.10	3.84	4.57	3.44	4.76	3.60	1.38
	(1.27)	(1.76)	(1.82)	(1.85)	(1.81)	(1.87)	(1.82)	(1.78)	(1.07)
Employee behavior	5.9	3.99	4.24	4.27	4.86	3.90	4.52	4.42	1.52
	(1.42)	(1.73)	(1.76)	(1.81)	(1.71)	(1.83)	(1.70)	(1.76)	(1.19)
Wrong order	4.91	4.42	4.78	4.83	4.91	5.55	5.36	4.26	1.44
	(1.54)	(1.72)	(1.65)	(1.69)	(1.56)	(1.52)	(1.57)	(1.62)	(1.12)
Lost order	5.43	4.35	4.82	4.72	4.80	4.49	4.47	4.28	1.47
	(1.45)	(1.70)	(1.61)	(1.65)	(1.61)	(1.68)	(1.70)	(1.69)	(1.19)
Mischarged	5.02	4.48	5.09	5.02	5.04	3.86	5.16	4.66	1.52
	(1.7)	(1.81)	(1.68)	(1.71)	(1.60)	(1.83)	(1.63)	(1.69)	(1.20)
Spillage	5.58	3.96	4.27	4.31	4.57	3.86	4.02	4.21	1.51
	(1.49)	(1.79)	(1.72)	(1.76)	(1.69)	(1.82)	(1.77)	(1.72)	(1.26)

Note: failure scores represent seriousness and recovery scores represent satisfaction

Exploratory factor analysis was performed for each service failure type and revealed a high similarity in loadings for all recovery strategies, consistently resulting in three factors. Confirmatory factor analysis across all failures, using Varimax rotation, resulted in three factors (see Table 2) accounting for 75.9 percent of total variance. Factor 1 included free food, discount, and coupon, all

monetary recoveries, thus, this factor was labeled *compensation*. Factor 2 included management intervention, replacement, correction and apology, all human related responses, thus, this factor was labeled *assistance*. Having no response is the only response contained in the last factor, making it a special case of responses, and clearly the least desirable response, here labeled *no action*.

Table 2. Factor results for recovery strategies across all failures

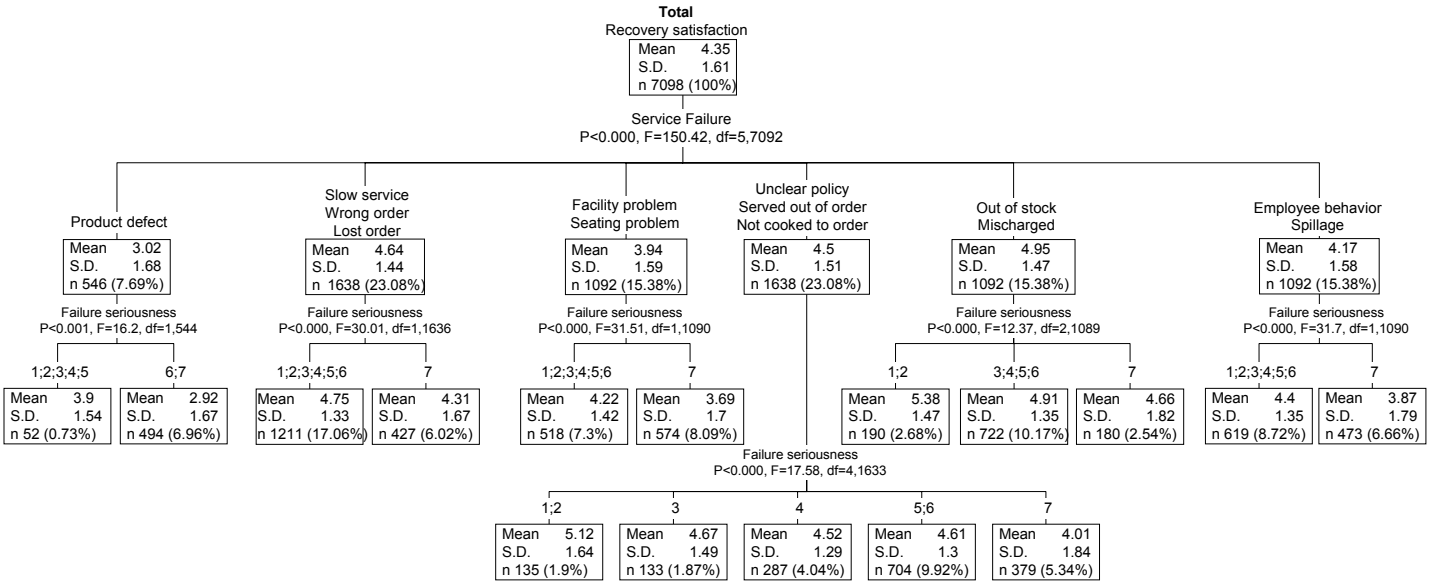
	Compensation Factor 1	Assistance Factor 2	No action Factor 3
Free food	.831	.288	.105
Discount	.847	.308	-.011
Coupon	.854	.276	.037
Management intervention	.232	.804	-.035
Replacement	.242	.717	.059
Correction	.226	.830	-.068
Apology	.378	.708	.099
Do Nothing	.067	.003	.993

Holding the recovery satisfaction score as the dependent variable, the two constructive recovery strategy factors (compensation and assistance) were separately analyzed with CHAID analysis to describe groups of failures that had similar recovery satisfaction scores. For the compensation strategy, predictors include two levels, the first being the failure type and the second the failure seriousness score (see Figure 1). Product defect is clearly the most serious failure and the failure for which financial compensation is least effective (mean 3.02). Respondents interpret the failure seriousness differently and tend to form two distinct groups, the first being those that score the seriousness as 1 to 5 and those that feel the failure is more serious and score it 6 to 7. Less than one percent of the respondents reported this failure as less than 6 in seriousness, with nearly 7 percent reporting a high seriousness level.

Other failure types formed groups with similar reactions to the compensation recovery strategy, with out of stock and mischarged obtaining the highest recovery scores when treated with compensation (mean 4.95). Most of the failures showed a split between high failure serious scores (usually 7) and all other scores. When a customer feels that the service failure is very serious, based on

his/her personal judgment, the recovery effectiveness drops off, but outside of this extreme judgement, most other levels of failure seriousness can be treated equally well with the recovery strategy. An exception to this is the group of failures unclear policy, served out of order and not cooked to order. Recovery satisfaction from these errors is highly dependent on the perceived seriousness of the failure ranging from the least serious (1 and 2) to the most serious (7).

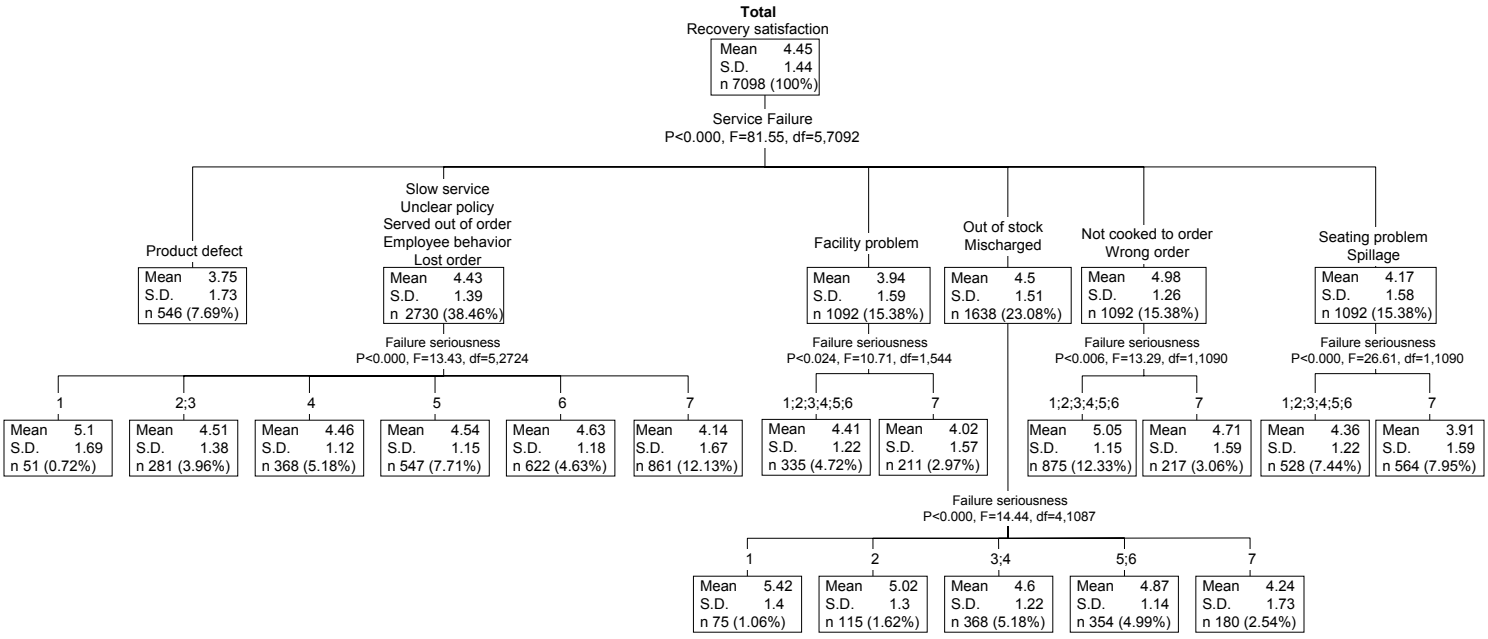
Figure 1. Predictors of recovery scores when employing compensation strategy



Analysis of the assistance recovery strategies results in a similar finding (see Figure 2), with most failures split between the most serious failure score (7) and all other scores forming a single group (1 to 6). Product defect again exhibits the lowest recovery satisfaction score, but higher than the corresponding score when treated with a compensation strategy. Not cooked to order and wrong order obtain the highest recovery score (mean 4.98), which differs from when the compensation recovery strategy is used. Between the two types of recovery strategies, only product defect and the group of out of stock and wrong order appear to form similar segments. All other failures group differently when examined on the basis of their resulting recovery satisfaction scores. This finding suggest that the recovery score depends on a matching between failure and recovery; and that respondents had an

expectation of the role the service provider was to perform when a certain type of failure occurred, not simply reacting to higher levels of compensation.

Figure 2. Predictors of recovery satisfaction scores when employing assistance strategy



Comparing the two recovery strategies (see Table 3), reveals the recovery that fits best with each failure type. Compensation-based recovery strategies are most effective for the failures out of stock, mischarged, slow service, and lost order. The failures unclear policy, served out of order and spillage were marginally better when treated with compensation than with assistance.

A larger difference was observed for those failures that were better addressed with the assistance recovery strategy than the compensation strategy. The failures product defect, not cooked to order, facility problem, employee behavior and seating problem all were best addressed by the assistance recovery strategy. These failures are related to the core service product or the outcome. The failures best addressed by a compensation strategy appear to be part of the service delivery, or process errors. These classifications (outcome and process) are very similar to those used by Smith et al. (1999), with the exception of out of stock, which they used as an example of an outcome failure. For

the sample frame, it appears that out of stock, as used in the simulation description, is more in line with a process failure, since the respondents were all ethnic Chinese living in Taiwan and the scenario presented was concerning a Chinese food restaurant (see earlier discussion).

Table 3. Highest recovery strategy for each failure type

	Compensation	Assistance	No Action
Out of stock	4.95*	4.73	2.03
	(1.47)	(1.35)	(1.43)
Mischarged	4.95*	4.73	1.52
	(1.47)	(1.35)	(1.21)
Slow service	4.64*	4.43	1.45
	(1.44)	(1.39)	(1.12)
Lost order	4.64*	4.43	1.45
	(1.44)	(1.39)	(1.12)
Unclear policy	4.5*	4.43	1.77
	(1.51)	(1.39)	(1.39)
Served out of order	4.5*	4.43	1.45
	(1.51)	(1.39)	(1.12)
Spillage	4.17*	4.13	1.52
	(1.58)	(1.44)	(1.21)
Product defect	3.02	3.75*	1.26
	(1.68)	(1.73)	(0.98)
Not cooked to order	4.5	4.98*	1.52
	(1.51)	(1.26)	(1.21)
Wrong order	4.64	4.98*	1.45
	(1.44)	(1.26)	(1.12)
Facility problem	3.94	4.26*	1.52
	(1.59)	(1.37)	(1.21)
Employee behavior	4.17	4.43*	1.52
	(1.58)	(1.39)	(1.21)
Seating problem	3.94	4.13*	1.38
	(1.59)	(1.44)	(1.07)

*Higher recovery rating

Discussion

While easy to say, it is difficult to seriously recommend to service providers that they only commit errors that are less serious, from the perspective of their customers. If service errors were so easily addressed, restaurant owners could simply adopt a zero defect goal. Although zero defects is a laudable goal, the reality of service variability makes it an unrealistic target. Role congruence may be more practical in overcoming service failures than simply stamping out errors or raising recovery costs in the hope that more expensive recoveries will have increased benefits.

The role expectations of customers are likely to be highly influenced by such overarching factors as culture, and even by more specific factors such as the restaurant type or the kind of food being served. The current results fit well with previous findings in so far as process failures (those activities related to the delivery of the service) should be addressed with compensation-based recovery efforts, while outcome failures (those involving the core service product) should be followed up with human-based assistance (see Figure 3). Offering compensation for outcome failures is not what the respondents in this study expected. While far better than doing nothing, assistance is a more appropriate response. Such assistance can also be used in process errors, with little difference in results, but needs to be balanced against the costs. Compensation, through the use of a coupon or discount, may have lower associated costs than having food replaced, or the manager intervene, and is in line with the role expectations of these respondents.

Figure 3. Appropriate use of recovery strategies

	Process	Outcome
Compensation	Appropriate	Inappropriate
Assistance	Somewhat Inappropriate	Appropriate

What types of errors make up process and outcome, and what type of recoveries constitute assistance and compensation needs to be explored at the micro level since the role expectations of the customers can be influenced by many contextual factors. Rather than starting with failures, which may be serious but relatively rare, these findings show that viewing recoveries as part of the flow of

interaction with the customer can have the advantage of understanding more clearly what the customer expects, or the sent role. If the service provider's received behavior matches the customer's role expectations then a relationship can be perpetuated rather than terminated.

Lastly, it is clear that understanding the service failure as part of a failure-recovery process, which should be described from the perspective of what the consumer expects, can bring benefits in the real world where service failures are bound to happen. However, some consumers are more sensitive than others to specific failures. The recovery attempt is always less appreciated by those that view the service failure as being most serious. Outside of this extreme view though, customers across the range of seriousness ratings accept the recovery effort equally well.

Limitations

Most restaurant failures and recoveries appear to be fairly consistent across cultures, but the difference in the perceived seriousness of the out of stock failure should raise a note of caution when attempting to apply these results. While the general finding of matching compensation with process failures and assistance with outcome failures may be generally true, it still remains to be understood what constitutes these types of failures and recoveries for the customers. These role expectations are informed by many circumstantial factors. The current study used a sample frame of ethnic Chinese with scenarios of eating at Chinese restaurants. This setting clearly differs from numerous other restaurants and their customers. A number of studies at more detailed levels will allow the separation of normative failures and recoveries, that cross all restaurant settings as well as those that are specific to certain settings.

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