To “Tangible” Intangible Service: The Buffering Effects of Service Quality Cues

Dr. Kungpo Tao, Assistant Professor of Elizabeth City State University, USA

ABSTRACT

Little is known about the customer's judgment of credence service quality. The purpose of the current study is to understand how customer will respond to service failure when they are exposed to service quality cues. Two managerial moderators of service relationship and service guarantee as the signals of service quality are added into a hypothesized model and employed as extrinsic cues. The finding indicates that trust in the service provider mediates the effect of perception of service failure on evaluation of quality of credence service. Both service guarantee and service guarantee have positive moderating effects on perceived expertise or benevolence of trust when a service failure is perceived. The buffering effect of service cues is identified when the negative impact of service failure is alleviated. The effect is further confirmed not only when the service is difficult to evaluate but also when service guarantee is presented as a strong quality signal.

INTRODUCTION

Apparently the asymmetrical information between the service provider and the customer is that anything else other the equal power is evidence of service nature. The customer’s knowledge of service is thus considered imperfect (Grewal and Marmorstein, 1994). Upon the perspective of lack of knowledge, the customer’s perception of service quality is subject to his/her uncertainty towards the service quality, and the degree to which the customer perceive uncertainty is influenced by external cues such as price reference furnished by the service provider (Biswas and Blair, 1991). Another challenge to perceive service quality is the judgment of credence service. Unlike most tangible products, service can be only evaluated during or after the service delivery as a result, making both customers' expectation and perceived performance of service different level of variance in terms of various signals or cues of service quality. To deal with the challenges, customers tend to seek heuristic signals or quality cues to reduce uncertainty and use intrinsic or extrinsic cues to “tangible” the intangibles of service. In physical product environment, intrinsic information seems to be more informative and will dominate signaling effects (Miyazaki et al., 2005). However, in service environment service is intangible and has fewer intrinsic cues to reflect service quality so that higher risk perception is expected (Murray and Schlacter, 1990). With the attempt of risk reduction in service environment, customers usually look into salient cues to form their expectations about the service (Bitner, 1992), and as a matter of fact, extrinsic cues have been suggested to help judging the service when customers must rely on the cues other than brand name and price (Zeithaml, 1988). However, negative associations of service quality are usually aroused after a service failure occurs as a result of customer perceptions of initial service outcomes falling below the customer’s expectations. Consequently, it could lead to significant costs of lost customers to the service providers. To deal with the problem, service providers need to learn more about the process of customers’ evaluation of service quality and the influences of managerial factors on customer trust. The relationships
have been well documented either between customer trust and customer loyalty (Nguyen et al., 2013) or between customer trust and customer satisfaction (Chandio et al., 2015); however, the relationship between customer trust and service quality has seldom been investigated in previous studies. It is the purpose of this study to examine the moderating effects of the two service cues on service quality.

**LITERATURE REVIEW**

**Service Quality and Service Cues**

Service quality is defined by Grönroos (1982) as "the outcome of an evaluation process where the consumer compares his expectations with the service he perceived he has received." Similar to Grönroos’s definition, the two constructs of service quality refers to the customer’s expectation and perception of service (Churchill and Surprenant, 1982; Parasuraman et al., 1985; 1988). According to Zeithaml (1988), service quality perception is the consumer's judgment about the overall excellence or superiority of a service. Due to the characteristic of intangibility, service is difficult to evaluate by measuring it (Crosby et al., 1990; Hong and Goo, 2004). Service quality basically is conceptualized by its two sub-dimensions - technical and functional service quality (Grönroos, 1983). Unlike technical service quality which refers to the quality of the service output (Sharma and Patterson, 1999), functional service quality, on the other hand, addresses the nature of the customer-service provider interaction and the means by which the service is delivered. In credence service, customers may have difficulty assessing technical outcomes due to the variability and the non-standardized nature of credence services which leads to uncertainty about the actual cost and service performance (Murray and Schacter, 1990). In the context of high credence service, service quality evaluation from the customer's perspective, for example, can be achieved through service providers' ability (Zeithaml, 1981) or physical surrounding (Bitner, 1995) to reduce perceived uncertainty about the service or the service provider itself. Such peripheral signal of service quality can be detected by customers when the service provider shows empathetic and responsive during service delivery. As a result, customers are likely to reduce uncertainty and enhance positive perceptions of the service outcomes. Such heuristic information or quality cues have been classified as intrinsic cues and extrinsic cues (Zeithaml, 1988). Among these service quality cues, intrinsic quality cues are associated with the essential nature of the product or service and they won’t be changed without changing their core function or performance while extrinsic quality cues are external to the core function/performance of the product or service (Miyazaki et al., 2005). In addition, the salient cues such as price serves as “risk reliever” to reduce perceived purchase risk (Bitner, 1992) and customers are likely to judge service quality by using more extrinsic cues rather than intrinsic cues which cannot be changed without changing its basic nature (Zeithaml, 1988). The extrinsic cues, as the signal of service quality have been employed and found its relationship with service quality perceptions (Boulding and Kirmani, 1993; Erevelles et al., 2001).

**Service Failure and Customer Trust**

Service failure is inevitable due to the unique nature of service associated with co-production and inseparability of production and consumption (Fisk et al., 1993). From the perspective of disconfirmation (Oliver, 1981), service failure occurs when the service outcome or process of service delivery does not meet the customer’s expectation (Holloway and Beatty, 2003; Parasuraman et al, 1991; Zeithaml et al., 1993). In fact, service failure is caused by a mistake or problem during service delivery and categorized as service delivery failures—failure to respond to customer needs and requests (Bitner et al., 1990),
outcome failures, and process failures (Stauss, 2002). Among various service failures, a core service failure may have the significant impact on the customer’s reactions (Chang, 2006). There are two kinds of core service failures—when service provider’s capability or performance cannot meet the customer’s needs and when the service delivery is flowed (Smith et al., 1999). Since service is impossible to be error-free, in most situations of service, customers may have failure expectations (McCollough et al., 2000). However, customers are usually not able to evaluate the service except a failure occurs. Thus, outcome quality could be the most import part for customers to judge how well the service provider can offer for them. When a service failure occurs, customers perceive the discrepancy between failure expectations and service performance, and then further expect appropriate recovery efforts. In car repair service, for example, customers may have expectation of possible problems during or after the service. They are likely to seek information which signals the service provider’s recovery efforts to redress the problem from the service failure. In the case of expectation of service failure, customers should be more sensitive to the service outcome and would be likely to predict service quality.

Trust has become a central role in the development of relationship marketing (Dwyer et al., 1987; Morgan and Hunt, 1994). Consist of several essential elements such as risk, uncertainty, and dependency, the integrative definition of trust proposed by Mayer et al. (1995) states that “the willingness of a trust to be vulnerable to the actions of trustee based on the expectation that the trustee will perform a particular action important to the customers, irrespective the ability to monitor or control that trustee.” According to Anderson and Weitz (1989), trust is considered one party’s belief that the other party will take actions to fulfill one’s needs. Among the components of trust, reliability reflects the expectation of counterparty’s behavior and the certainty that the counterparty will keep his/her promise (Dwyer and Oh, 1987; Schurr and Ozane, 1995). Another component of trust concerns the behavioral intention that implies the trustor’s vulnerability and uncertainty (Moorman et al., 1992). In service marketing, customer trust in salesperson has been widely investigated and shown that trust is positively related to the customer’s experience with salesperson (Crosby et al., 1990; Doney and Cannon, 1997). In fact, the salesperson’s characteristics such as expertise (Crosby et al., 1990; Doney and Cannon, 1997) and likeability are positively associated with the customer’s trust in the salesperson and, in turn, positively influence trust in the company (Doney and Cannon, 1997). Due to the inability to evaluate the quality of credence service during the service delivery or even after the delivery, customer trust in service employee or service provider becomes a shortcut to reducing uncertainty and risks and ensuring service quality. From the viewpoint of process of trust development, assessment of the other party’s credibility and benevolence is required to build up trust when both parties have shared experience that entails prediction of other’s behavior. Based on the discussion above, trust seems to be better fit into a two-dimensional construct when consumers consider a service provider either professional or beneficial. Build on the knowledge from previous studies, the construct of trust has two measures as the perceived credibility and benevolence of a target of trust (Doney and Cannon, 1997; Kumar et al., 1995).

Service Cues of Service Guarantee and Service Relationship

Perceived credibility is making service tangible when in fact it is attributable to the nature of the service guarantee. Service providers are thus highly motivated to offer service guarantees to customers in case of having a service failure. Among various service guarantees ranging from incompletely specified to full compensation without conditions, a well-designed service guarantee is suggested to perceive higher quality and lower risk of service (Hart et al., 1990; Ostrom and Iacobucci, 1998; Wirtz, 1998). An unconditional guarantee, for example, is presented frequently since it is the most powerful without
conditions (Hart, 1988). However, McDougall, Levesque, and VanderPlaat, (1998) suggest that a full satisfaction guarantee stating all aspects of service covered by the guarantee is not always the best type. In fact, customers may prefer a specific guarantee to a full guarantee when they consider the full guarantee ambiguous and concern about the ease of claiming the guarantee (Meyer et al., 2014; Crisafulli and Singh, 2016). On the basis of salience, service guarantee can be labeled either implicit or explicit. An implicit service guarantee is likely to lead to negative perceptions when it is formalized (Hart, 1988). On the other hand, if a service provider does not explicitly specify the coverage of guarantee, customers are likely to perceive its inherent ambiguity which would in turn result in a higher uncertainty and make customers unable to foresee the outcomes of the service (Wirtz and Kum, 2001).

In service setting, the characteristic of individualization leads service a unique experience to each customer as a result, shifting service to a focus of relationship marketing from a transaction focus (Gundlach et al., 1995; Mattila, 2001). According to Gutek, Bhappu, Liao-Troth, and Cherry, (1999), there are three types of service relationships. Firstly a true relationships occurs when a customer contacts with the same service provider. In other words, the customer expects to interact with the same service provider in future and is able to identify a particular person as his/her service provider (Gutek, 1995). The customers in the relationship are likely to expect to gain benefits from the build-up relationships (Gwinner et al., 1998). The relationship benefits associated with social or emotional bonds which leads to the decrease of risk perception (Mattila, 2001) explains why customers are likely to remain in the relationship with physicians and barbers (Shemwell et al., 1994). Secondly there is no service relationship when every time the customer interacts with a different service provider (Gutek et al., 1999). The service encounter in the case is actually considered a single interaction between a customer and a service employee, and it is neither the customer nor the employee’s expectation to interact with each in the future. Lastly pseudo-relationship occurs when a customer interacts with different people but a single service provider (Gutek et al., 1999). Under the situation, a minimal relationship is built up between a customer and a service provider/company since the customer’s expectation of future interaction with the service provider still exists even though the customer will meet a stranger every time visit. In conclusion, the service relationship is built up when customers are acquainted with the service employees who are considered the important cues to service quality (Crane and Clarke, 1988). In other word, the customer's evaluation of service is often influenced by the contact personnel who represent the service or the service provider (Chong and Wong, 2005).

CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

This study is designed to exam the effect of service failure on customer trust and service quality under two service cues—service guarantee and service relationship. As model shown (Figure 1), a customer’s trust toward the service provider depends on his/her perception of service performance. Since credence service is difficult to evaluate even after consumption (Zeithaml, 1981), the assessment of credence service all relies on the customer’s trust—expertise and benevolence. In an auto service setting, Andaleeb and Basu (1994) have examined the factors influencing the service quality and found that the customer’s perceptions of service quality depends on the complexity and the customer’s knowledge about the auto repair service. Their finding indicates that customers are usually not knowledgeable to respond to technical issues and they are forced to look to the other peripheral aspects of service. As the research model shown below, the prediction of the effects of service guarantee is based on the customer’s perception of service performance. If a service failure is anticipated and customers perceive a weak
service guarantee (conditional and partial refund), the service purchase is considered a risky action. Given that service failure is inevitable, service outcome remains uncertain until the service has been delivered. It is why customers are likely to assess the quality cues such as service guarantee and service relationship.

![Research Model](image)

**Figure 1: Research Model**

In the fact of service purchase, whether to offer guarantee becomes the key deciding factor in evaluating service quality. When a service failure occurs, customers may want to be compensated for their inconvenience or loss by seeking the service obligations. The consumer may expect that the way of recovery and compensation is ambiguous. Service guarantees can address this problem and makes it clear to the consumer what may cause a failure, how to redress, and what outcome will be (Halstead et al., 1993). Through the presence of expertise-related cue, not only the service could be trusted when there is a specific and unconditional guarantee that meets the service obligations (McDougall et al., 1998), but customers are encouraged to initiate a complaint for successful recovery. In the case, such a strong service guarantee is expected and its positive effect should enhance the customer's trust in expertise toward the service provider. On the other hand, maintaining close relationships with customers is also critical to protecting service provider from negative consequences (Mattila, 2001). Customers in a true relationship condition are more willing to forgive the service provider for poor handling of the problem than customers in a pseudo relationship since they expect social benefits such as personal recognition and friendship from the service provider (Gwinner et al, 1998). The two interactional hypotheses of service guarantee and service relationship are proposed as below:

**H1:** The negative impact of service failure on perceived expertise of trust is weaker when a strong service guarantee is presented than when a weak service guarantee is presented.

**H2:** The negative impact of service failure on perceived benevolence of trust is weaker when there is a true relationship between the customer and employee than when there is a pseudo relationship.

A good service guarantee design that is proposed by Wirtz (1998) should be unconditional and clear meaning to customers. Consistent finding from McDougall et al., (1998) indicates that a combined unconditional guarantee with specific payout clauses would most appeal to customers. In fact, customers seem to prefer explicit service guarantee to implicit cues (Wirtz et al., 2000). The specific and unconditional guarantee is thus considered a strong guarantee since it has a positive effect on customer evaluation (Kashyap, 2001). Given that service guarantee signals the perception of service quality, it is expected that customers are likely to form favorable judgments about the service when service guarantee is presented as strong guarantee. Similarly, a true service relationship that a service provider has built up
with customers is attributable to positive association with service quality. In Mattila’s (2001) relationship study, the influence of relationship with customers will reduce the customer’s resistance to premium prices. Hess et al. (2007) also show that the negative effect of service will be mitigated by the customer’s favorable service experience containing the past interactions with service employees (Grewal et al., 2007). Consequently, the personal recognition and relationship benefits expectation in a true relationship will lead to a more positive impact on the customer’s evaluation of service quality. The two hypotheses are thus proposed as follow:

**H3:** The positive impact of perceived expertise of trust on service quality is stronger when a strong service guarantee is presented than when a weak service guarantee is presented.

**H4:** The positive impact of perceived benevolence of trust on service quality is stronger when there is a true relationship between the customer and employee than when there is a pseudo relationship.

**METHODOLOGY**

This study is conducted by an experimental design based on a 2x2x2 between-subjects completely randomized factorial design with two levels of service outcome manipulated by service encounter (failure/non-failure), two levels of service guarantees (strong and weak), and two levels of service relationships (true and pseudo). Each respondent was randomly allocated to one of the eight groups. Participants were presented with a role-playing scenario describing an ignition problem caused by the car battery. In the scenarios, each respondent is asked to image that s/he went to a dealership to check and fix the car problem. The outcome of the car repair service is manipulated. In the evaluation of service performance, the customer was told that her/his car problem was either existing or fixed. In the presence of service guarantee, the types of service guarantee was manipulated by varying the extent to which the customers consider the service guarantee (strong guarantee with full refund and no conditions or weak guarantee with partial refund and conditions). In service relationship, the manipulation effect is made between the customer and the service employee. Two situations are presented in the scenario. In true relationship, the service employee is able to identify the customer immediately when the customer enters the dealership, and the service employee is the same person the customer will interact every time visit. In pseudo-relationship, the service employee and the customer don’t know each other and they didn’t meet before. A convenient and random sampling has been conducted in the study. Both student and real consumer samples were employed in this study and student participants came from a public university located in a city of an east coast state. The student sample was chosen through online survey and the participants are mainly junior and senior students who were encouraged to take part of the study by awarding extra credits in marketing classes. The other sample consists of real consumer participants who came from a city of an eastern state. These consumers participated in the study by answering a paper-and-pencil survey and they were recruited individually during their visit to a restaurant located in a metropolitan shopping center. The total of both student and consumer samples is 411. The respondents’ age ranged from 19 to 80, with the median age being 28.0 and 47.7 percent of the respondents were females.
ANALYSIS AND RESULTS

To ensure the effect of experimental manipulations, respondents were asked to rate the extent to which the service failure they felt in the scenario and to what degrees they perceived the service guarantee and service relationship. ANOVA was conducted on each of these three variables as independent variables. As expected, the respondents in the service failure group scored significantly lower ($M = 2.45$) than the non-failure group ($M = 5.41, F(1, 410) = 529.5, p < .001$). For evaluating service guarantee, the respondents were more likely to rate the service as strong when guarantee was cited as full refund with no condition ($M = 5.74$) than when guarantee was partial with conditions ($M = 2.64, F(1, 410) = 600.4, p < .001$). For assessing service relationship, respondents scored the perception of relationship with the service employee significantly higher when the relationship was presented as pseudo-relationship ($M = 5.50$) than when the relationship was true relationship ($M = 2.62, F(1, 411) = 494.0, p < .001$). Each two-way interaction is evaluated separately for the group formed based on the high and low levels of the other variable. To test hypothesis H1 that service guarantee moderates the effect of service failure on Expertise, an ANOVA is conducted and shown in Table 1, a significant interaction between service failure and service guarantee on expertise is found ($F(1, 410) = 4.90, p < .05$). The main effect of service failure on expertise holds when service guarantee is strong ($F = 113.12, p < .01$). Thus, H1 is supported.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>S-Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Failure</td>
<td>61.59**</td>
<td>149.0**</td>
</tr>
<tr>
<td>Service Guarantee (moderator)</td>
<td>113.12**</td>
<td>n/a</td>
</tr>
<tr>
<td>Service Relationship (moderator)</td>
<td>n/a</td>
<td>41.66**</td>
</tr>
<tr>
<td>Customer Trust of Expertise (CTE)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Customer Trust of Benevolence (CTB)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Service Failure—Service Guarantee</td>
<td>4.90*</td>
<td>1.96</td>
</tr>
<tr>
<td>Service Failure—Service Relationship</td>
<td>4.71*</td>
<td>4.59*</td>
</tr>
<tr>
<td>CTE—Service Guarantee</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>CTB—Service Relationship</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

F-value with *p < .05; **p < .01

Figure 2 plots the interaction indicating that consumers will perceive higher level of expertise toward the service provider when a strong service guarantee is presented, compared to a weak service guarantee. As expected, there was no significant difference of benevolence between strong and weak service guarantee when a consumer experienced a service failure ($F(1, 410) = 1.96, p > .5$). To test hypothesis H2 that service relationship moderates the effect of service failure on benevolence, ANOVA shows a significant interaction ($F(1, 410) = 4.59, p < .05$). Therefore, H2 is supported and Figure 2 plots the interaction indicating that consumers will perceive higher benevolence toward service provider when there is a true relationship, compared to a pseudo relationship. The last two hypotheses are to test the moderating effect of service guarantee and service relationship on the relationship between trust and perceived service quality. As shown in Table 1, the interaction between expertise and service guarantee was significant ($F(1, 392) = 3.96, p < .05$). Figure 2 plots the interaction and indicates that service guarantee does matter when consumers perceived high level of expertise toward the service provider. In other words, a strong service guarantee, compared to a weak service guarantee, effectively enhances customer's perception of service quality. H3 is thus supported. The last hypothesis H4 is to test the
interaction between benevolence and service relationship on perceived service quality. However, ANOVA in Table 1 shows that the moderating effect of service relationship on service quality is not significant ($F(1, 392) = 2.28, p > .05$). Figure 2 plots the interaction and shows that customers will perceive better service quality when they believe that the service provider is benevolent no matter of true or false relationship.

![Figure 2: Moderating Effects of Service Guarantee (SG) and Service Relationship (SR)](image)

**DISCUSSION AND IMPLICATION**

With the difficulty evaluating service quality, customers tend to seek proxy or signals of quality to assess service quality. To “tangible” intangibles of services, customers are likely to evaluate what they could not see by what they could see. Results of this study highlight the moderating effects of service guarantee and service relationship between trust and service quality. The finding shows that the negative impact of service failure on expertise decreases as a strong service guarantee is presented. In other words, the negative effect of service failure can be “buffer” not only when the service is difficult to evaluate but also when service guarantee is presented as strong. The finding indicates that customers expect service guarantee to be accessible and that the customer’s perception of expertise is influenced by the service provider’s attitude about how service guarantee is carried out. Service relationship, on the other hand, is also important for building up benevolence. The professional nature of auto-repair service is not only associated with technical context but also related to service relationship. Establishing a relationship with customers will not only enable positive perceptions of service evaluation but also further foster customer retention (Gwinner et al., 1998; Palmatier et al., 2006). Through building customer relationship, service providers can exploit the unique relational resource to gain competitive advantage over competitors.

Based on the finding of the study, customers perceive service quality as a result of anxiety-reducing cues. Service providers thus should focus on the control of cues that influence customers’ expectations for the following reasons. First of all, tangible evidence or cues of service quality are necessary to project the credence service quality. When service failure is common in the service industry, both service guarantee and service relationship are good cues for marketers to use to alleviate the negative effects of service
failure. From the customer’s point of view, what a customer demands is a consistent service and offering a service guarantee is an effective way to attract more customers. When service failure occurs, tangible compensation does provide a reassurance to customers. Service firms, therefore, are encouraged to use service guarantee to persuade customers so that their service will have been eventually redressed. In auto repair industry, customers appear to be reassured by receiving full and explicit compensation for a service failure. Secondly, service guarantee is considered an essential component of marketing strategy to not only build up customer trust but enhance the perception of service quality. Consistent with the finding of Liden and Edvardsson (2003), the positive effect of service guarantee can be found when expertise of service provider is perceived as high. Similarly credence services such as medical care and financial service that require high level of expertise may benefit from the credibility with full guarantee without conditions. In conclusion, for setting the marketing policy, service firms should apply the service quality cues to fit their formats and goals. If the goal of service providers is to increase their expertise, service guarantee should be considered; however, if the objective is to establish benevolence consumers will feel, a true relationship is more appropriate.

The present study is subject to limitations. In order to create a more realistic auto-repair experience through an imaginary scenario in the survey, the study has pretested for the effect of manipulation but it could still lack the realism and complexity of an actual visit. Customers might be likely to skip their attention to the cue of service guarantee simply because they were not aware of until the service employee mentioned it. Furthermore, the finding could also be limited to some well-known stores since it is common for no-brand stores to offer other things than refund guarantee. Future research should consider more variables to complete the hypothesized model. Intrinsic quality cues, for example, could be on the right track since they can better signal the service quality provided by the firm than extrinsic quality cues with which consumers can barely infer quality since they are not difficult to imitate for the same service competitors.

REFERENCES


