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Understanding Guest Tolerance and the Role of Cultural Familiarity in Hotel Service Failures

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ABSTRACT

This study investigates how cultural familiarity and service failure characteristics affect hotel guest ratings of their tolerance and satisfaction toward a failure in hotel service. The study is significant for two key reasons: (1) it provides the first examination of the effects of cultural familiarity in a service failure setting, and (2) introduces the construct of guest tolerance as an important outcome evaluation of the hotel experience. Data was collected from an online survey of 740 Australians. The study comprised a 2 (failure type) x 3 (severity of failure) x 3 (cultural familiarity) experimental design. While a main effect showed that ‘interpersonal’ failures were less tolerated and resulted in less satisfaction than ‘non-interpersonal’ failures, this effect differed depending on severity of the failure. Interaction effects demonstrate that high cultural familiarity magnifies the effect of high service failure severity in respect of levels of tolerance and customer satisfaction ratings.

KEYWORDS

Service failure; cultural familiarity; severity; tolerance; customer satisfaction

Introduction

The experiential nature of a service encounter means a service outcome is often unpredictable (Gronroos, 2000) and this unpredictability has flow-on effects on consumer responses. This is, particularly, true for the tourism and hospitality industry, where service is offered in a highly intangible form and is thus subject to constant variations (Bradley & Sparks, 2009; Cranage & Mattila, 2006; Loo, Boo, & Khoo-Lattimore, 2013). Such variations in service performance may result in customer perceived service failure, which can
be compounded further, where a reported service failure is not rectified adequately (Kim & Tang, 2016; Silber, Israeli, Bustin, & Zvi, 2009).

Academic research into service failure has been important to service management (Grönroos, 2000) and an ongoing issue for business (Lewis & McCann, 2004). As a result of service failure, service providers may suffer from decreased levels of customer satisfaction (Sparks & McColl-Kennedy, 2001), increased levels of negative word of mouth spread by aggrieved customers and lost customers (Cranage & Mattila, 2006). Tourism and hospitality growth is forecast to rise substantially in the next decade, especially in the Asia-Pacific, but with a consequent talent deficit (WTTC, 2015). Accordingly, the pool of qualified, well-trained personnel working in hotels may diminish. If this situation arises, then there is a likelihood of higher levels of service failure and poor recovery execution in hotels across a much larger hospitality sector, than is the case now. In turn, extant research on service failure increases with a focus on failure characteristics, such as the type, frequency, and severity of failure, as well as situational factors, such as the stages of the service encounter, cultural differences or presence of other customers (e.g., Kim & Jang, 2014; Kim, Lee, & Mattila, 2014; McQuilken & Robertson, 2011; Namkung & Jang, 2010; Smith, Bolton, & Wagner, 1999).

Two further areas of interest are proposed in this paper that arguably could shed more light on why hotel guests respond differently to service failure situations. First, how tolerant is a guest toward service failure and second, does the guest response vary because of the cultural location of the failure. For instance, do tourists respond to service failure in the same way when they are visiting an unfamiliar cultural destination compared to a more culturally familiar destination? The concept of customer tolerance denotes that there is a zone within which the service is considered to be satisfactory in the eyes of the customer (Parasuraman, Berry, & Zeithaml, 1991). That is, guests may hold ‘desired’ service performance expectations, but will find a level of service performance that meets ‘adequate’ expectations as acceptable. A number of scholars in hospitality have recognized the importance of a better understanding of tolerance in the service context (e.g., Torres, Van Niekerk, & Orlowski, 2016; Zainol, Lockwood, & Kutsch, 2010), however research to date has been extremely limited. Second, when hotel guests are travelling to an unfamiliar cultural location, is it reasonable to ask what performance standards will be used to judge the hotel? Thus, understanding the issue of tolerance to different levels of service performance becomes more salient as the global travel market continues to grow.

Furthermore, to comprehensively test the efficacy of cultural familiarity of a destination for a hotel guest, key situational factors of the type of failure and severity of failure are also proposed as salient factors. Accordingly, the purpose of this study will be to test the main and interaction effects of cultural familiarity, failure type, and severity of failure on the dependent variables of guest satisfaction and tolerance.

**Literature review**

In this study, customer satisfaction and tolerance are treated as two dependent variables (see Figure 1). During or after service delivery, customers evaluate service quality and develop satisfaction or dissatisfaction (Bitner, Booms, & Mohr, 1994). This evaluation occurs for each service encounter and each evaluation affects the overall satisfaction (Mattila, 2006). Customer satisfaction results from the comparison of their prior expectations with the actual or perceived service performance. The most widely accepted
conceptual approach to defining expectations is to consider customer expectations not as a single, fixed level, but as a hierarchy of levels (Oliver, 1977). Thus, customers may hold high expectations, which they deem desirable and would hope, can be met. However, they might hold lower expectations (at the same time), which are more realistic and deemed to be adequate, if met. When service performance does not meet a customer’s adequate expectation standard, the customer will be dissatisfied. In turn, the customer will be very satisfied if performance exceeds the desired expectation.

The zone that binds these two expectations is the zone of tolerance within which the service performance is acceptable or satisfactory (Parasuraman et al., 1991). While having multiple expectations adds a level of complexity to understanding guest responses, this complexity is further compounded because the researchers argue that the levels of customer desired and adequate expectations will vary depending on a wide range of situational and individual factors (e.g., Parasuraman et al., 1991). Research on the customer’s zone of tolerance has primarily focused on the comparisons of these expectations in the context of ‘pre-service’ performance (e.g., Nadiri & Hussain, 2005). That is, before the guest has experienced the service. In addition, research into customer tolerance from the context of service failure has been limited. Among the few studies (e.g., Huang & Wang, 2014; Zainol et al., 2010) that have discussed the issue of tolerance to a service provider or customer behavior, in the service encounter, none have investigated how tolerance levels change, especially in the service failure situation. That is, within which hotel service failure conditions are tolerance levels moving up or down or do they remain unchanged. However, Torres et al. (2016) reported that variations exist between how hotel employees tolerate uncivil behavior from their peers and customers.

Service failure has been the subject of extensive research over several decades. Despite this effort, researchers remain interested in better understanding of two aspects of service failure in particular: the relative importance of factors related to the consumer response; and how might situational factors affect such relationships. Several theories have been utilized to examine customer responses in the service failure situation. Customer responses can be viewed through disconfirmation theory (e.g., Oliver, 1977), attribution
theory (e.g., Bitner, Booms, & Tetreault, 1990), emotional responses (e.g., Bonifield & Cole, 2007), and justice or fairness theory (e.g., McCollough, Berry, & Yadav, 2000). The latter stream of justice studies have focused on service failure with recovery, in particular.

A key approach to examine the consequences of service failure draws from the work of Gronroos (2000) in service management where failure is depicted in dichotomous terms as either ‘outcome’ or ‘process’ oriented. The outcome dimension relates to what is being delivered to the customer, such as a meal in a restaurant. The process dimension relates to the manner of service delivery, such as the personal interaction with a waiter (Silber et al., 2009). This approach relates closely to two of the recognized dimensions in justice theory: distributive justice and interactional justice. Distributive justice refers to the perceived fairness of the outcome of the exchange between the service provider and customer. Whereas, interactional justice is concerned with how well was the customer treated in the interpersonal aspect of the exchange relationship (Blodgett, Hill, & Tax, 1997). Despite the simplicity of the outcome/process model, Nikbin, Marimuthu, Hyun, and Ismail (2015) argued that the relative importance of these service dimensions remains unresolved and the effects of moderating situations are unclear. This inconsistency in results is also found in the related justice literature on service recovery from a failure (Del Rio-Lanza, Vazquez, & Diaz-Martín, 2009). In general, most service failure research includes the type of failure and the magnitude of service failure (Sajtos, Brodie, & Whittome, 2010). Thus, outcomes of a service failure tend to depend on both its type and severity (Chu, 2007), but such factors are likely to be insufficient of themselves.

**Type of failure, severity of failure, and cultural familiarity**

In this paper, we follow the approach of Smith et al. (1999) to depict service failure as arising in part from the type of service failure: namely outcome or process oriented. Accordingly, service failures might be caused by the behavior of the hotel employee (an interpersonal or process failure) or the unmet expectations of the guest toward the core benefit of service consumption (a non-interpersonal or outcome failure) (Levesque & McDougall, 2000; Smith et al., 1999). Several scholars have placed more importance on core service aspects (Levesque & McDougall, 2000; Mattila & Patterson, 2004). Perhaps, customers are more concerned with the economic loss that is borne from a core or functional failure rather than the psychological one that results from an interpersonal aspect. In contrast, some scholars have emphasized the greater importance of the manner of the employee when delivering service (Bitner et al., 1990; Keaveney, 1995; Smith et al., 1999) since interpersonal situations provide greater opportunity to manage service quality (Bearden, Malhotra, & Uscategui, 1998). We argue that an interpersonal failure should extract a stronger response based on the notion of controllability from attribution theory. Controllability relates to whether the customer believes that the failure was within the service providers’ control. Interpersonal failures are largely within subject person control. Whereas, an outcome failure, such as a transport delay, could be affected by other conditions outside the control of the service provider. In support, perceived fairness theory would suggest that service providers may be given the benefit of the doubt when customers are uncertain about whether to attribute blame directly to the service provider. While other research has reported that customers can be intolerant of poor service performance regardless of the type of service (e.g., Anton, Camarero,
Carrero, 2007), customers can be more certain about attributing blame in the case of a rude service provider (van Vaerenburgh et al. 2014). Therefore, the following hypothesis is proposed:

**H1a** The level of tolerance will differ by type of failure, whereby an interpersonal failure results in lower levels of tolerance than for a non-interpersonal failure.

**H1b** The level of satisfaction will differ by type of failure, whereby an interpersonal failure results in lower levels of satisfaction than for a non-interpersonal failure.

We recognize that the gravity of a perceived service failure will vary according to a customer’s point of view with consequent evaluations and outcomes. Extensive studies in the service area have related the severity of service failure to customer evaluations (e.g., McCollough, Berry, & Yadav, 2000; Smith et al., 1999), especially satisfaction (e.g., Aaker, Fournier, & Bradel, 2004; Hess, 2008; Sajtos et al., 2010; Weun, Beatty, & Jones, 2004). While failure severity is almost a ‘given’ in modeling customer outcomes, several researchers advocate its inclusion in any model reflecting customer responses to service failure to ensure integrity of the study results (e.g., Wang, Wu, Lin, & Wang, 2011). Furthermore, the degree of perceived severity plays an important role in establishing the pre-conditions for an effective service recovery (Swanson & Hsu, 2011). Thus, serious failures may be beyond recovery. In support, Kim and Jang (2014) indicated that tolerance to a service failure will vary according to the level of severity. More specifically, McQuilken and Robertson (2011) suggested that a severe failure is likely to narrow the zone of tolerance. However, in both studies this relationship was not tested. Therefore, the following hypothesis is proposed:

**H2a** The levels of tolerance will differ by severity of failure, whereby higher levels of failure severity will result in lower levels of tolerance.

**H2b** The levels of satisfaction will differ by severity of failure, whereby higher levels of failure severity will result in lower levels of satisfaction.

In a globalized travel industry, increased cultural interactions between service providers and customers are inevitable (Tsaur et al. 2005). This phenomenon is particularly true for the hospitality industry that requires a high degree of cultural interaction between host and hotel guest (Pizam & Jeong, 1996). From a customer behavior perspective, a large body of evidence has supported the idea that customer familiarity with a product or service provider will influence customer evaluation and outcomes (Chuang, Cheng, Chang, & Yang, 2012). For instance, the influence of familiarity (with a local service provider) on customer evaluation has been found in the context of a medium contact service (restaurant) (e.g., Patterson & Mattila, 2008). This work is supported by Tsai, Yang, and Cheng (2014) who found that personal relationship factors significantly moderated customer perceived outcomes in a restaurant context. In this case the level of personnel familiarity was related to different expectations of service behavior. This line of thinking is supported by attitude-behavior research (e.g., Ajzen, 1991) that recognizes past experience or prior knowledge as a primary determinant of customer evaluation and subsequent behavior. Within the travel context, a group of studies have found familiarity...
with local food is an influencing factor on guest evaluation and behavioral intentions (e.g., Seo, Kim, Oh, & Yun, 2013). In addition, support for the hypothesis is drawn from attribution theory which suggests that in more certain situations customers are likely to be more confident about expected standards and less tolerant of failures. Accordingly, customers may form different expectations when engaging with foreign firms and employees than with a domestic provider. Thus, customer evaluations, which include tolerance and satisfaction toward failure, may also differ. This difference may be attributable to customers’ familiarity toward the normative standards associated with a particular culture. For example, people who have extensive knowledge about the culture of a destination far from home might be more confident in their service consumption than someone with little knowledge of the foreign culture. Therefore, customer expectations and assessments of service performance may be inversely affected by familiarity with the culture of the destination. The following hypotheses are proposed:

H3a  Levels of tolerance will differ as a result of cultural familiarity, whereby higher levels of familiarity will result in lower levels of tolerance.

H3b  Levels of satisfaction will differ as a result of cultural familiarity, whereby higher levels of familiarity will result in lower levels of satisfaction.

This study argues that the more severe the failure the more dissatisfied customers will be; and the more familiar customers are with the culture of the destination, the more intolerant they will be. But, are customer tolerance and dissatisfaction toward high failure severity affected by the locations where failure takes place (familiar or unfamiliar)? Conversely, can it also be argued that customers will be less tolerant and less satisfied in the event of high failure severity, irrespective of the location? Therefore, a tentative directional hypothesis is proposed to determine which of these theories is more likely:

H4a  There is a difference in the means for tolerance for different combinations of severity of failure and cultural familiarity, with the highest difference occurring under conditions of high severity in a familiar destination.

H4b  There is a difference in the means for satisfaction for different combinations of severity of failure and cultural familiarity, with the highest difference occurring under conditions of high severity in a familiar destination.

**Method**

An experimental study was designed using hotel scenario stimulus materials developed specifically for the study. These materials were pre-tested (separately for each independent variable) extensively and pilot tested (as a whole), prior to conducting the main survey in order to ensure the effectiveness of manipulations and to improve convergent and divergent validity, as suggested by Perdue and Summers (1986). Manipulation tests were also taken at the time of the main data collection. Recruitment of the sample was based on Australian males or females over 18 years old who were born in Australia and spoke
English as their mother tongue. This was done to minimize diverse cultures or people who recently migrated to Australia. The sampling frame for this investigation was an email list obtained from a company that holds a privacy compliant market list with a Frequent Global Travelers segment. This segment represented people who frequently travel internationally and enjoy active, outdoor, and traditional holidays. Ultimately, data were collected from 740 people whereby 66.8% participants were female and most participants were between the ages of 31 and 60 years (56.5%). Most (85%) had travelled 1–3 times in the past year.

The experimental study comprised a between subject 2 (type of failure: interpersonal, non-interpersonal) × 3 (severity of failure: low, medium, high) × 3 (cultural familiarity: low, medium, high) design. Respondents were randomly assigned to one of 18 scenario conditions and asked to respond to questions measuring the dependent variables of customer tolerance and satisfaction. To measure customer tolerance, five items using descriptors such as tolerable/intolerable; unacceptable/acceptable; unreasonable/reasonable were rated on a seven-point Semantic Differential scale. The items were developed for this study from terms drawn from a series of six focus group interviews conducted specifically for this study. A series of Likert-type items measuring satisfaction was also included. The five items were adapted from Oliver and Swan (1989) and included terms such as, being pleased with the service; happy with the service; rate the service as good (see Appendix A). Questions to measure scenario realism and manipulation checks were also collected in the survey (see Appendix A).

The independent variable type of failure was manipulated in terms of the cause of the failure: (1) interpersonal (manner of the employee) or (2) non-interpersonal (functional failure). The type of failure condition was operationalized using an unfriendly hotel employee (interpersonal condition) or a late airport pick up service for the non-interpersonal condition. Severity of service failure was manipulated to represent three levels (low, medium, high). The three severity levels for interpersonal failure included: mild unfriendliness; unfriendly behavior and rudeness. The three levels of non-interpersonal failure reflected different waiting times for the pick-up service: 5, 15, and 30 minutes. Finally, the manipulation of cultural familiarity was operationalized using Australia for high familiarity (Australian residents were respondents), Indonesia for medium familiarity (popular destination and close Asian neighbor) and Russia for low familiarity. Appendix B provides a sample of one of the scenarios used in the study.

Results

To check the realism of the scenarios two sets of questions, each comprising two items using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) format were included in the questionnaire. The first two questions measured the credibility of the manipulations (e.g., the situation in the story is realistic) while the second set of two questions measured how easy it was to imagine being a hotel guest illustrated in the scenario (e.g., I can play the role as hotel guest in the story easily). The mean scores for the four individual questions ranged from 5.62 to 6.03, suggesting that scenarios viewed by respondents appeared realistic and easy for the role play. Furthermore, a series of one-sample t-tests showed that each of these four sample mean scores was significantly (p < .001) greater than the scale mid-point of 4.
To check the effectiveness of the manipulation of each independent variable, multiple item scales were developed for each of the three independent variables. The measurement scales for the type of failure and cultural familiarity used a Likert-type format while the scale for severity of failure used a semantic differential format (see manipulation check items in Appendix A). All three scales used a 7 point format. The internal consistency for each of the three manipulation check scales were found to be highly reliable with Cronbach’s Alpha scores ranging from 0.94 to 0.96. The mean scores for each of the conditions operationalized for each independent variable were examined and found to be significantly different from each other at $p > 0.001$. The mean scores all differed in the expected order. The mean scores for manner were (1) interpersonal type of failure (1.57) and non-interpersonal type of failure (3.18) and as a second check, mean scores for waiting time (on time—late) were (1) interpersonal type of failure (3.77) and non-interpersonal type of failure (5.12); (2) severity of failure was 3.40; 4.13; and 4.68 (low, medium and high respectively), and (3) cultural familiarity was 2.55; 3.61; 6.34 (low, medium and high respectively).

In addition, following a best practice approach (Blodgett et al., 1997; Perdue & Summers, 1986) for assessing the effectiveness on the manipulations of the independent variables, three ANOVA’s were conducted separately to check whether the manipulations performed satisfactorily. First, to assess the manipulation of the type of failure: a 2 (type) × 3 (severity) × 3 (familiarity) ANOVA was conducted with the measurement scale of type of failure as the dependent variable. As expected, there was a significant main effect associated with the type of failure manipulation ($F$: 344.0, $p < 0.001$), but no significant effect for cultural familiarity. However, there was also a significant main effect on type of failure by severity but the effect size was small (3% of variance), especially compared to the manipulated variable (32% of variance). Second, to check the effectiveness of level of severity manipulation, a 2×3×3 ANOVA was conducted with perceived severity of the failure scale as the dependent variable. As expected, there was a significant main effect associated with the severity of service failure manipulation ($F$: 51.2, $p < 0.001$) but not for cultural familiarity. However, there was a significant main effect on severity by type of failure but the effect size was small (2% of variance). While the effect size of the severity manipulation on the severity manipulation scale was modest (12% of variance) this far exceeded the confounding effect of type of failure. Third, to check the effectiveness of the level of the cultural familiarity manipulation, a 2×3×3 ANOVA was conducted with the cultural familiarity manipulation scale as the dependent variable. There was a significant main effect associated with the cultural familiarity manipulation ($F$: 613.4, $p < 0.001$), but not for severity of failure. However, there was a significant effect on cultural familiarity from type of failure but the effect size was small (1% of variance), especially compared to the manipulated variable (63% of variance). Overall, the interpretation of the main effects of each manipulated variable was not affected by any potential confounding variable. Thus, all three manipulations of the independent variables were found to be working as expected and ready for the main analyses.

Finally, to check the validity and reliability of the dependent variables of tolerance and satisfaction, Principal Axis Factoring (PAF) and Cronbach’s Alpha values were undertaken. Ten items (five measuring tolerance and five measuring satisfaction) were analyzed using SPSS PAF with oblique rotation (as, theoretically, tolerance and satisfaction are likely to be related) was undertaken. The results indicate adequate sampling (KMO 0.93) and explained 66% of the variance with two clear factors. The tolerance items all loaded on
one factor (loadings from 0.63 to 0.92) whereas the satisfaction items all loaded (0.86 to 0.91) on another factor with no cross loadings. Cronbach reliability for each scale was satisfactory: 0.91 for Tolerance and 0.95 for Satisfaction).

**Hypotheses testing**

MANOVA was performed to test the hypotheses of the main and interaction effects of the three independent variables (type of failure, severity of failure and cultural familiarity) on the two dependent variables (customer tolerance and satisfaction). The MANOVA (see Table 1 for details) revealed a significant multivariate main effect of type of failure ($p < .001$), severity of failure ($p < .001$) and familiarity with culture ($p < .05$). The main effects were qualified by significant two-way multivariate interactions: type by severity ($p < .01$) and severity by culture, ($p < .05$). There were no significant interaction effects for the type of failure by cultural familiarity ($p = .86$) or for the three-way multivariate effect of all of the independent variables simultaneously ($p = .51$). The next section provides a brief description of the univariate main effects followed by the more important interaction effects.

For the univariate main effects associated with type of failure, respondents reported less tolerance and less satisfaction when experiencing an interpersonal failure compared to a non-interpersonal failure (see Table 2 for mean scores). These results support $H1a$ and $H1b$. Similarly, the between subject univariate tests identified the significant role of severity of failure on each of the two dependent variables (see Table 1). The post hoc tests (SNK) revealed that the mean scores for tolerance levels differed at each level of severity of failure (see Table 2). For customer satisfaction, the mean of the low severity of

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<th>Table 1. Multivariate and Univariate results of customer tolerance and customer satisfaction by type of failure, severity of failure, and cultural familiarity.</th>
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Source: MANOVA of survey data, using total sample ($n = 740$)
Note: $^a$Pillai’s Trace multivariate test. $^b$Exact statistic.
failure differed from those of the medium and high. It should also be noted that the levels of tolerance and satisfaction is lower in the condition of high failure severity than in medium and low severity. These results suggest that both hypotheses H2a and H2b are partly supported.

Hypotheses 3a and 3b argued that cultural familiarity would have an inverse relationship to tolerance and satisfaction. The between subject univariate tests for familiarity with culture demonstrated a significant effect for customer tolerance (p < .05) but not for satisfaction (p = .12). Post hoc tests (SNK) revealed that the mean for customer tolerance varied between the high familiarity group and the medium/low familiarity group but no difference occurred between the medium and high familiarity groups (see Table 2). These findings support H3a but not H3b.

As highlighted, the main effects are subsumed within interaction effects, demonstrating that the main effects vary in conjunction with other variables. A significant type by severity interaction was detected for both dependent variables (p < .01). The patterns of the interaction are presented in Figure 2 for customer tolerance and Figure 3 for customer satisfaction. Simple effect tests (conducted at p < .05) reveal the level of tolerance varies significantly within each level of severity for each type of failure, although the effect is greater in the low and medium severity conditions than it is in the high severity condition. The level of tolerance for a non-interpersonal type of failure varies significantly across severity conditions. Interpersonal failure type shows significant differences for level of tolerance between low and medium severity and low and high severity levels. No significant difference exists for interpersonal type between medium and high severity levels.

Simple effects tests (conducted at p < .05) reveal the degree of satisfaction varies significantly within each level of severity for each type of failure, although the effect is greater in the low and medium severity conditions than it is in the high severity condition. The degree of satisfaction for non-interpersonal type of failure varies significantly across severity conditions, but this is not the case for interpersonal failure type where no significant difference occurs across severity conditions. In summary, the interaction effect is mainly derived from the pattern of responses to interpersonal type of failure across the severity levels. In contrast to the main effects, an interpersonal failure is rated as causing a similar amount of dissatisfaction irrespective of severity.

Univariate between-subject analysis showed a significant severity by cultural familiarity interaction for each of the dependent variables: p < .05 for tolerance and p < .01 for

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<th>Table 2. Descriptive statistics and mean differences.</th>
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*Mean score does not differ, p < .05
satisfaction. Figure 4 and Figure 5 demonstrate the patterns of this interaction for customer tolerance and satisfaction respectively. Simple effects tests (conducted at $p < .05$) show a similar pattern for tolerance level in low and medium cultural familiarity for each level of the severity of failure. That is, for both levels of cultural familiarity, the variations of tolerance level are significant between low and high and between low and medium severity of failure. For high cultural familiarity, significant differences in the tolerance level were found between low and high and between medium and high severity of failure. Within the severity of failure across all levels of cultural familiarity, there were no significant differences in the low and medium severity level. Significant differences
were found in the condition of high severity between low and high and between medium and high familiarity. It can be seen that a significant effect of severity of failure occurs only in the condition of high severity in the high cultural familiarity. These results are in contrast to the main effect, which found that the tolerance levels differ significantly across all levels of severity. In summary, cultural familiarity plays a significant moderating role in the effect of severity of failure on customer tolerance.

The results of simple effect tests (conducted at $p < .05$) revealed that within the low and medium cultural familiarity conditions there was no difference for levels of customer

Figure 4. Two-way interaction effect of severity and cultural familiarity on customer tolerance.

Figure 5. Two-way interaction effect of severity and cultural familiarity on customer satisfaction.
satisfaction between high and medium severity of failure. However, a low level of severity was rated significantly more favorably than either medium or high severity conditions. In the high cultural familiarity condition the pattern is somewhat different, with significant differences in customer satisfaction ratings when comparing low or medium severity with high severity. The degree of customer satisfaction toward each level of severity of failure differs significantly in the low and high severity conditions, although not across all levels of cultural familiarity. In the low severity of failure condition, a slight significant difference was found only between low and high cultural familiarity. In the high severity of failure condition the significant differences occurred between low and high and between medium and high severity of cultural familiarity. Thus hypotheses H4a and H4b are partly supported.

In summary, the interaction between severity of failure and cultural familiarity on customer satisfaction is predominantly found in the condition of high severity of failure and high cultural familiarity. High familiarity appears to magnify the effect of high severity in respect of customer satisfaction ratings.

**Discussion**

This study investigated the simultaneous effects of three independent variables (type of failure, severity of failure and cultural familiarity) on a hotel guest’s tolerance and satisfaction to a service failure. The results presented in the previous section indicate significant support for all research hypotheses. First, the significant effects of the type and the severity of failure on both customer tolerance and satisfaction generally support Hypotheses 1a; 1b and 2a; 2b. In addition, this study provides new key insights into the importance of the effects of cultural familiarity on customer tolerance and satisfaction (Hypotheses 3a and 3b). Last, the interaction effects between cultural familiarity and severity were significant (Hypothesis 4a and 4b) and deepen the understanding of the role of cultural familiarity with a travel destination.

**Theoretical contributions**

In the service failure literature, while interpersonal interactions are considered important, the core service attributes that relate to the reliability of service performance have been regarded as being more important in the failure situation. Indeed, researchers have argued that non-interpersonal failures are less likely to be forgiven (Mattila, 1999), especially by business travelers (Su, Swanson, & Chen, 2016). However, this study extends understanding of the importance of the interpersonal aspect in a service encounter. Within a service failure context, customer tolerance and satisfaction toward interpersonal failure, as opposed to the non-interpersonal failure, is lower. It appears that people can more easily assess when someone is rude and this seems to be quite confronting and unacceptable for most guests. There may be less certainty about standards for non-interpersonal failure resulting in more negative evaluations (see Folger & Cropanzano, 1998).

Moving to the effect of severity of failure on customer satisfaction, the findings in this study are consistent with the existing literature (e.g., Hoffman & Kelly, 2000; Mattila, 1999; Smith et al., 1999), but its effect on customer tolerance is new and suggests interesting insights, especially for managers. This study revealed that the severity of failure had an inverse impact on customer tolerance, such that when the severity of failure is higher,
tolerance to the failure is lower. This finding largely mirrors the effects of failure severity on satisfaction. In recognizing that guests have a zone of tolerance that provides a buffer for small mistakes in service delivery it is now evident that as mistakes become bigger this buffer zone is likely to become smaller. Guests are not tolerant when larger mistakes occur. Yet most zone of tolerance research assumes that tolerance levels are static across different situations. In the service failure situation, it is clear from this study, that tolerance is a more elastic concept than previously envisaged. Accordingly, as the field of service failure research matures, it is likely that researchers will turn to more subtleties, such as tolerance and individual and situational effects, as Parasuraman et al. (1991) envisaged we should.

Furthermore, it is evident that cultural familiarity with a travel destination plays a key role in influencing customer tolerance and satisfaction. Hotel guests do evaluate service failures differently when failures occur in locations with which they are not culturally familiar. The more familiar a guest is toward the culture of the destination, the less tolerant they will be. Indeed, as tourists become more culturally familiar with a destination, their knowledge is likely to increase their confidence and feelings of security which leads to a less threatening experience (Weaver & Lawton, 2010). Thus, when experiencing service failure in a more culturally familiar location, guests are more likely to respond in a more confident (or maybe more assertive or even aggressive) manner due to a reduction in their level of tolerance to failure. Thus, tolerance levels may be an important precursor variable for studies examining complaint behavior and related service failure outcomes.

A key contribution from this study derives from the interaction effects of severity of failure with both type of failure and cultural familiarity. Our findings extend the widespread view that an interpersonal failure is more critical than a non-interpersonal failure (e.g., Smith et al., 1999). While the main effects in this study support this generalized view, we also found that the overall interpersonal failures decrease tolerance and satisfaction levels regardless of the level of failure severity. In contrast, the effects from a non-interpersonal failure will depend upon the severity of the failure. This finding contrasts with the argument by Anton et al. (2007) that customers can be intolerant of poor service performance regardless of the type of service. Similarly, the level of cultural familiarity of a destination moderates the effect of a failure. This magnifying role of cultural familiarity is another new insight for service failure research. The difference in customer tolerance and satisfaction is most pronounced when high failure severity occurs in high culturally familiar settings. In other words, when high severity of failure is experienced at a destination with a lower cultural familiarity, customer satisfaction and tolerance remain higher. This ‘stickiness’ of guest evaluations to stay positive despite a major service delivery mistake again breaks new ground to challenge assumptions that a common service delivery mistake will be treated equally by all guests.

In summary, as was argued by Parasuraman et al. (1991), customer tolerance varies within and among individuals. This study provides the first empirical evidence that variations in customer tolerance can be attributed to the type of failure, the severity of failure and cultural familiarity.

**Managerial implications**

While service failure is inevitably going to occur during some service encounters (Grönroos, 2000), attempting to provide zero service failures for all hotel guests is almost unachievable (Namkung & Jang, 2010). Hence, minimizing the occurrence of service failure and
mitigating the service failure incident is widely regarded as more appropriate. This study confirms the importance of understanding the service failure paradigm as this knowledge can lead to more positive guest outcomes. Furthermore, this study re-affirms the need for managers to employ effective service failure preventative measures and for employees to be trained in the art of effective service delivery, including effective failure recovery strategies. In addition, the study also provides some further specific insights that would enable a hotel to deliver better service to its guests. These latter aspects are now discussed.

First, a greater focus on service delivery standards of performance is warranted. Service standards will assist in mitigating service failures. Such standards should encompass the recognized ‘moments of truth’ elements associated with service delivery and should be widely known among the hotel workforce. For instance, in delivering a (non-interpersonal) service, such as a hotel airport transfer pick-up, a standard could be set not to let the hotel guest wait for more than a defined amount of time, without invoking a service failure recovery strategy. In some cases, it could be argued that making guests wait more than one minute for a particular ‘moment of truth’ service element will produce a negative response. It is suggested that where applicable hotel managers can undertake the development of such critical incident service standards. In this study, it has been demonstrated that low, medium and high severity of service failure conditions can be predetermined. Accordingly, hotel managers can likewise predetermine, and regularly adjust, some predetermined standards of service delivery. Regular consultation with employees and guests will likely provide a sound foundation to set such standards.

The second aspect arising from this study relates to interpersonal skills of frontline staff in service delivery. In general, hotel employees will be trained to understand what constitutes guest service and what customers expect to receive during their service consumption. While the core or non-interpersonal service is important, the ‘people’ aspect during the service encounter is also critical to the success of the service performance. Accordingly, the key to a successful service interaction lies in the employee’s interpersonal skill and requires managers to be mindful of this aspect when selecting frontline staff for their ability to undertake non-interpersonal tasks. It would be risky to select staff for frontline roles based solely on core or technical skills. Subsequently, managers need to focus considerable attention on the people skills (interpersonal) aspect, such as delivering the service in a courteous and friendly manner and train staff accordingly. Indeed, when the non-interpersonal aspect of service does not work properly, but is delivered in a courteous manner, customers become more tolerant. In contrast, even though the non-interpersonal aspect of service runs smoothly, when it is delivered in an unfriendly manner, customers may become dissatisfied.

Finally, this study demonstrated that knowledge relating to cultural familiarity might be a useful tool to use in service failure situations. First, hotel management can anticipate an appropriate action to handle customers who have a high or low level of cultural familiarity with the destination and/or hotel because of their likelihood to have different levels of tolerance and satisfaction in the event of service failure. This is especially the case for repeat customers who have previous experience with and knowledge about the hotel service. It is likely that repeat customers may be more demanding especially when their service experiences are not delivered as they expected. On the other hand, customers with a low level of cultural familiarity will tend to have higher tolerance to a service failure. In turn, novice guests are more unlikely to file a complaint. This means that employees need
to be able to identify service failures experienced by such guests instead of letting failures go unnoticed. Hotel managers need to possess guest information either before or on arrival and to monitor guest experiences. It is thus incumbent on hotel managers to identify their guest characteristics on booking and/or check-in to ascertain their likely needs and expectations. For some hotels the welcome drink event may become an important tool to gather important guest information. Communication from employees to managers about guest experiences and comments will also assist in delivering better service performance. While task oriented employees will focus on achieving their work requirements they should also be rewarded for providing feedback on guest experiences—good and bad.

**Limitations and future research**

There are limitations of this study that require acknowledgement. First, data were collected using written scenarios that require participants to imagine the illustrated situations. In reality, respondents may react in a different way. However, scenario realism checks were undertaken and with the use of random assignment of respondents to each scenario, the issue of external validity has been addressed and minimized within the context of this experimental simulation. Accordingly, it is acknowledged that without the use of a field experimental design, the generality of the results must be interpreted with caution (Bradley & Sparks, 2009) and the external validity of the study needs to be validated in further studies. Furthermore, the sample for this study comprised a relatively homogenous group of Australians who have previously travelled internationally. It is recognized that cultural dissimilarities may bias the results. However, the study attempted to select travel destinations that matched/mismatched this cultural homogeneity as much as possible. If the population reflected a more heterogeneous group of travelers then this cultural matching may be more problematic. Last, the manipulation of type of failure and severity of failure were seemingly subtle. As commonly found in service failure research, it appeared that these two variables couldn't be fully separated (see Smith et al., 1999). In other words, minor confounding effects between the two variables were unavoidable. It would be interesting for future research to manipulate the interpersonal and the non-interpersonal levels of type of failure separately.

Future studies may want to improve the generality of the study. A cross country or cultural comparison study could be fruitful. The tolerance levels of respondents from different countries or from different cultural backgrounds can be compared. Perhaps, future research could answer how tolerant Western versus Eastern customers in a familiar versus unfamiliar holiday destinations are. Moreover, extension of this study to other hospitality or tourism settings, such as restaurants or airlines could be interesting. Future research could consider other types of hospitality experiences and whether the customer is a regular, loyal customer or not. A limitation and opportunity for future research is associated with the extent of travel experience people may have, especially with foreign cultures. Future research could investigate how exposure to other cultures influences tolerance levels associated with service levels.
References


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**Customer tolerance α = 0.91**

I feel that the standard of service described in this story would be:

- Intolerable—Tolerable
- Unacceptable—Acceptable
- Unreasonable—Reasonable
- Inadequate—Adequate
- Unforgivable—Forgivable

**Satisfaction α = 0.95**

I would rate the quality of the service by this hotel as favorable.
I am happy with the service provided by this hotel.
I am satisfied with the quality of the service provided by this hotel.
I would rate the service provided by this hotel as good.
I am pleased with the service provided by this hotel.
Appendix A. Measurement items for dependent variables and manipulation check scales

**Type of failure** $\alpha = .96$
- The driver was attentive
- The driver was friendly
- The driver was helpful
- The driver was respectful
- The driver was on time—very late

**Severity of failure** $\alpha = 0.94$
- How severe was the service problem?
- Not at all severe—Extremely severe
- Minor problem—Major problem
- Small inconvenience—Big inconvenience
- Minor annoyance—Major annoyance

**Cultural familiarity** $\alpha = .96$
- I am familiar with the culture of [Australia/Indonesia/Russia]
- I am familiar with [Australia/Indonesia/Russia] as holiday destination
- I can easily judge whether I am getting a good service when on holiday in [Australia/Indonesia/Russia]
- I am familiar with [Australia/Indonesia/Russia] food
- I find it easy to communicate my needs if on holiday in [Australia/Indonesia/Russia]

Note: The country name depends upon the condition the participant was exposed to.

Appendix B. Sample scenario (Non-interpersonal failure type, high severity, low cultural familiarity)

You are having a holiday with your partner or friend in Moscow, Russia. This is the first visit to Russia for both of you. You and your partner/friend have booked a seven nights stay in a 4 star hotel. When booking the hotel, you also took an option to book and pay for a pick up transfer from the airport to the hotel. Prior to your departure from your home, you received a confirmation letter from the hotel about your hotel room and the pick up service. It is guaranteed in the letter that a driver will be at the arrival hall at 3.00pm to take you to the hotel.

After your flight, you arrive safely at Moscow airport. You collect your luggage. In the arrival hall, you see lots of travel guides holding boards with customers’ names displayed. You look around. You cannot see your name on any board. You check the time and notice it is now 3.00pm.

You stand in the arrival lounge waiting and at 4.00pm, a man in a uniform from the hotel arrives holding a board with your name. You approach him and tell him that it’s your name written on the board. He looks at your luggage and asks you to follow him to the van. You head off to the hotel.

On arrival at the hotel, the driver stops the van and directs you to the lobby. You walk into the hotel lobby and while checking-in, you tell the receptionist about your experience with the hotel pick-up service. You take your key and make your way to your room.