

Dealing with Service Failures:
The Use of Explanations

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Abstract

This study investigated the impact of four types of explanations following a tourism service failure. Written scenarios were used to orthogonally manipulate explanation type and failure magnitude. Both independent variables had significant effects on customer satisfaction and justice perceptions. Apologies yielded more favourable outcomes than did referential accounts. Specific forms of justice mediated the effects of three explanation types. This research links different explanation types to different forms of justice, thereby shedding light not only on what types of explanations assist most with service recovery, but also on how they have their effects.

Keywords:

Explanations, Service Recovery, Justice, Service Failure Magnitude,
Customer Satisfaction.

Introductory Note

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Travel, tourism and hospitality firms offer a range of service experiences, many of which are highly intangible and subject to variability. Under such conditions, service failures occasionally occur, and managers and front-line staff can seek to restore customer satisfaction in a number of ways (Chan, Wan, & Sin, 2007; Karatepe, 2006). They may, for example, acknowledge the problem, provide an explanation, invite customer input as to possible solutions, offer discounts, coupons or a replacement service, and/or follow up on recovery progress (see, e.g., Blodgett, Hill, & Tax, 1997; Davidow, 2003). Service firms need reliable, research-based information regarding the likely efficacy of these and other recovery strategies.

Past research (e.g., McColl-Kennedy & Sparks, 2003) has found that individuals have a normative expectation to receive an explanation following a breakdown in service. Customers want to be able to understand what went wrong, why it went wrong, and what is being done about it. The desire for an explanation may be particularly acute in travel and tourism contexts, because of the unfamiliarity and consequent unpredictability of many such contexts. But does the provision of explanations actually appease aggrieved customers? The current study investigated this question. The theoretical foundation for the research was the model of social accounts proposed by Folger and Cropanzano (1998). We also drew extensively on justice theory (e.g., Adams, 1965; Bies & Moag, 1986; Greenberg, 1993; Thibaut & Walker, 1975).

Types of Explanations

Explanations or “social accounts” (the terms are used interchangeably in this paper) can take many forms (Bobocel & Zdaniuk, 2005; Greenberg, 1993). Bies (1987), for example, distinguished the following four types:

- *excuses*, i.e., accounts that invoke mitigating circumstances in order to absolve the service organization of responsibility for the adverse outcome;
- *justifications*, i.e., accounts that involve admission of responsibility, but which attempt to exonerate the service firm by legitimizing its actions on the grounds of shared needs and/or higher goals;
- *referential*, i.e., accounts that seek to minimize the perceived unfavorability of the failure by invoking downward comparisons (e.g., with those who are worse off following the service failure);
- *apologies*, i.e., accounts that involve an admission of failure and an expression of remorse.

Drawing on Bies's four explanation types, Folger and Cropanzano (1998) proposed a "tentative" model of the impact of social accounts in organizational settings. They argued that there is, as yet, "no complete theory of when and why some explanations produce beneficial effects" (p. 143). Their model includes three exogenous variables (type of account, the sensitivity with which the account is communicated, and the thoroughness of the account), two moderator variables (communication medium and problem severity), two variables mediating the effects of accounts (perceptions of account adequacy and account honesty), and three outcomes (satisfaction, feelings of injustice, and conflict). The current research tested selected aspects of this model within a service failure and recovery context.

Using Explanations to Reduce Harm

Social accounts have been studied for several decades. While some research (e.g., Starlicki, Folger, & Gee, 2004) has shown that their use occasionally backfires, and other studies (e.g., Bobocel, Agar, Meyer, & Irving, 1998) indicate that explanations do not have universally favorable consequences, the majority of past

research shows that explanations generally succeed in reducing perceptions of harm (Colquitt & Chertkoff, 2002; Liao, 2007; Karatepe, 2006; Mattila, 2006; Shaw Wild, & Colquitt, 2003). Not only does this research indicate that the provision of an explanation is usually better than no explanation at all, but there is also some evidence supporting the efficacy of each of the specific types of accounts identified by Bies.

Despite this evidence, several gaps in our understanding of the impact of explanations remain (Bobocel & Zdaniuk, 2005). There is, for example, limited knowledge as to the *relative* efficacy of different types of explanation. Most of the evidence that is available comes from organizational behaviour, and thus a second knowledge gap relates to the generalizability of explanation-related effects from organizational to other (e.g., service firm-customer) contexts. Third, findings have not been entirely consistent even when conducted in a single context. There is, therefore, an ongoing need to identify moderators, or boundary conditions, that contribute to the inconsistencies in past research findings. Finally, relatively little is known regarding the psychological mechanisms, or mediating paths, through which explanations have their effects. (Bobocel & Zdaniuk, 2005; Folger & Cropanzano, 1998). The following paragraphs elaborate upon each of these deficits in our knowledge, and describe the contribution made by the current study to fill each gap.

The Relative Efficacy of Different Explanation Types

Whilst much research has examined the impact of explanations, not many studies have been designed to compare different types of explanation (Bobocel & Zdaniuk, 2005). Some (e.g., Baer & Hill, 1994) have included a plurality of account types, but have not reported findings separately for each type. Studies that have conducted valid empirical tests between explanation types have typically compared only two (or three) types. Indeed, no prior study was located that contrasted the full

set of Bies's explanation types. In studies that have compared a subset of these, some combinations have been compared quite frequently, whilst other possible combinations have been almost entirely neglected. (Studies comparing apologies and referential accounts are, for example, very rare).

The largest body of evidence is available in respect of excuses and justifications: Shaw et al. (2003) conducted a meta-analysis of 36 studies that compared these two types and concluded that excuses are more effective than justifications. But findings from a substantial minority of studies run counter to this general conclusion (see, e.g., Bobocel et al., 1998; Conlon and Ross, 1997). Similar uncertainties exist in respect of apologies. The review by Davidow (2003) noted that "despite a preponderance of managerial literature ... emphasizing the importance of an apology as part of an overall complaint management strategy, very little research has investigated this issue" (p. 24). This reviewer then describes several past studies that have yielded very mixed findings. Bobocel and Zdaniuk (2005) make the same point. More recent studies (e.g., Duffy, Miller, & Bexley, 2006) also do not strongly support the efficacy of apologies.

As Bobocel and Zdaniuk (2005) recently argued, there is a need for "more research into the relative effects of explanations" (p. 473). Given that the current research is perhaps the first to assess the relative efficacy of Bies's (1987) four explanation types, and that past studies have shown the explanation types to have effects that differ, but not always in consistent directions, it seemed premature to propose a directional hypothesis regarding the relative efficacy of the explanation types. Rather, since past studies have found significant differences between types, we limited our first hypothesis to:

- H1. Evaluations (of satisfaction and perceived justice) vary with type of explanation.

Service Provider-Customer Interactions: A Different Context?

As noted, past research examining the impact of different explanations has not yielded entirely consistent findings. One probable reason is the different contexts in which the research has been conducted. For example, most of the studies included in Shaw et al.'s meta-analysis involved explanations given in organizational settings, typically by a manager to a subordinate, and it is thus not known whether the findings observed can be generalized to other (e.g., tourism and travel service) contexts. Some research suggests that the effects of explanation type may be different in the service context than in the intra-organizational environment. For example, in research conducted in an organizational context, Conlon and Ross (1997) found justifications resulted in higher levels of satisfaction and perceived justice than did apologies, whereas a study of aggrieved corporate customers by Conlon and Murray (1996) observed little difference in the impact of these two explanation types. Findings such as these raise doubts as to whether effects observed in communications between participants in intra-organizational settings can be reliably generalized to transactions in boundary-spanning (e.g., service provider-customer) settings.

Within-Context Moderators

Even within a single context, it is likely that other variables moderate the impact of different explanation types (see e.g., Bobocel et al., 1998; Johnston & Fern, 1999; Sparks & Callan, 1996; see also Bobocel & Zdaniuk, 2005). Folger and Cropanzano (1998) argue that one particularly important moderator of the effects of explanations is the severity or magnitude of the negative event (here, a service failure), that is being "accounted" for. Past research provides some support for this

claim. However, there is conflicting evidence as to the direction this moderating effect takes (i.e., whether explanations have stronger effects under conditions of low or high problem magnitude). For example, Conlon and Murray (1996) reported that satisfaction with an explanation decreased as problem severity increased. According to these researchers, extremely costly failures represent a boundary condition under which explanations no longer continue to have beneficial impacts. In contrast, Shapiro (1991) reported significant effects associated with explanation type only under conditions of high severity. Similarly, Sparks and Fredline (2007) found that referential accounts resulted in higher levels of satisfaction than did justifications, but only when the service failure was severe. These latter findings are consistent with the so-called “fair process” effect: as outcomes worsen, process factors (e.g., type of explanation) play an increasingly influential role in fairness (and other) judgments. To further investigate this issue, the current study manipulated magnitude of service failure and examined whether this variable moderates the efficacy of different explanation types. We recognized that explanations may not be efficacious in response to very high magnitude service failures, but we aimed to study failures of only moderate severity and predicted that, within this range, differences between explanation types will be enhanced by increases in failure magnitude.

- H2. The effects of explanation type on customer evaluations are moderated by magnitude of service failure: larger differences between explanation types are evident under conditions of high (vs. low) magnitude.

Mediators of the Effects of Explanations

In a recent review of the explanations literature, Bobcel and Zdaniuk (2005, p. 473) argued that there is a critical need for more “process-oriented research to discover the psychological mechanisms through which explanations have their

effects.” One approach, favored by several researchers (e.g., Liao, 2007; Mattila, 2006; Smith et al., 1999), is to explore the extent to which the effects of explanations are mediated by perceptions of justice or fairness. (Thus, justice acts as both an outcome of social accounts and as a mediator of other outcomes). There is a growing literature demonstrating links between justice considerations and customer evaluations of service delivery and recovery (see, e.g., Bowen, Gilliland, & Folger, 1999; Clemmer, 1993; McColl-Kennedy, & Sparks, 2003; Tax, Brown, & Chandrashekar, 1998; Wirtz, & Mattila, 2004).

Several types of justice can be distinguished: *distributive* (i.e., fairness of outcomes), *procedural* (i.e., fairness of formal procedures used to allocate outcomes), and *interactional* (i.e., fairness of interpersonal treatment during the process). Some authors (e.g., Colquitt, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1993) divide the third of these into two types of interactional justice: *interpersonal*, which relates to the extent to which the parties are polite, courteous, and respectful of each other, and *informational*, which relates to the extent to which appropriate and relevant information is communicated between the parties.

Applying justice theory (e.g., Bies & Moag, 1986), service failure and recovery attempts can be predicted to affect customer evaluations by altering customers’ sense of whether they have been treated fairly. Indeed, the theory, and some research based on it, suggests that the type of justice that plays this mediating role varies with the type of explanation. Apologies, for example, have frequently been shown to lead to increases in interactional (or interpersonal) justice (Goodwin & Ross, 1992; Wirtz & Mattila, 2004), which then serves to bolster satisfaction. Similarly, referential accounts, by altering perceptions of the relative value of outcomes, are likely to affect customers’ sense of distributive justice. Justifications

(i.e., provision of internal, but defensible, reasons for the failure) may give the customer a sense of informational justice and hence help minimize dissatisfaction. Last, excuses (i.e., attempts to locate the source of the service problem outside the control of the organization) may reassure the customer that the service firm's policies and systems were not to blame for the service failure, in which case excuses would insure a sense of procedural justice.

H3. The effects of explanation type are mediated by justice perceptions, with the impact of (a) apologies mediated by considerations of interpersonal justice, (b) referential accounts mediated by distributive justice beliefs, (c) justifications mediated by informational justice perceptions, and (d) excuses mediated by procedural justice beliefs.

Method

The study used a 5 (explanation) x 2 (magnitude) between-subjects experimental design. Stimulus materials comprised written scenarios of a service failure and recovery set in a local theme park. Respondents read one of 10 different versions of the scenario, imagined that they were the aggrieved customer, and evaluated the efficacy of the particular recovery tactics described.

Participants.

The sample comprised 430 undergraduate university students who took part in the study in exchange for course credit. There were 327 females (76%) and 103 (24%) males. The mean age was 22.2 years ($SD = 7.2$). English was the first language of 384 (89%) of the participants. Most (72%) were born in Australia, with smaller proportions born in 27 other countries. The majority (88%) had visited a tourism theme park in the previous year.

Scenarios.

The script for the scenario was adapted from one developed previously by the authors (Collie, Bradley, & Sparks, 2002), and was refined through two pilot studies using convenience samples of students. In all ten versions of the scenario, two students tried to take advantage of a special deal that entitled them to a reduced-price lunchtime meal at a theme park restaurant. However, on presenting their coupons at the restaurant, they were refused the special meal. The versions differed in terms of the two independent variables only.

Explanation type was manipulated in a manner consistent with conceptual definitions provided by Bies (1987). Operationalizations were substantively similar to those used in past studies (e.g., Conlon & Ross, 1997). Thus, the restaurant supervisor provided one of the following accounts for the service failure:

- “We have already written to someone from your Student Association to tell them the offer has finished. I’ve got the letter somewhere out back. It’s not our fault. They shouldn’t be still giving out these lunch coupons. [*excuse*]
- “I am sorry this has happened to you. I know it must be annoying when you have been looking forward to this special meal. All I can say is, please accept our apology for the misunderstanding [*apology*]
- “We had to stop running the offer. It was a promotion, but most of the foodstuffs are out of season now. It would cost us a fortune to get them in from interstate, or wherever. We’d go broke if we offered that particular meal so late in the season. [*justification*]
- “Next week, the other parts of the package will also expire, and students will then have to pay full price for everything. So, you are still getting a really

good deal compared to student groups that come here from next week on
[*referential*]

In the “no explanation” condition, none of these statements appeared.

Magnitude of service failure was manipulated by the availability or non-availability of a substitute meal similar to the special offer meal. The following text was used:

- “Sure” says the supervisor, “We can put together something for you that is a bit similar to the special. It’s pretty good. I’m sure you will like it. Why not have that?”

and later in the scenario:

You ... eat the meal quickly. It tastes really good [*low magnitude*]

- “No” says the supervisor, “We are pretty low on everything now, so we can’t do anything similar to the special. No, nothing like it Why not have that instead?” (pointing to another meal on the blackboard menu)

and later in the scenario:

You ...eat the meal quickly. It tastes pretty bad [*high magnitude*].

Thus, consistent with some prior research (e.g., Smith, Bolton, & Wagner, 1999, restaurant study; Worsfold, Worsfold, & Bradley, 2007), increases in severity were indicated by greater differences between the meal desired and the meal available. In all versions of the scenario, the special meal was to be available at a discount price (\$8), but the substitute meal cost the normal price (\$12). See the appendix for a generic version of the scenario script. The full set of 10 scenarios is available from the first author upon request.

Measures

Items measuring all variables were selected from instruments established in the literature, and were complemented by several previously-unused items. Analyses of the pilot study data enabled the initially-large number of items to be reduced to smaller sets measuring each construct that met reliability, validity and other psychometric criteria. All items used a Likert-type format in which response alternatives ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Items from Willson and McNamara (1982) assessed the realism of the scenario (“I think there are service problems like this in real life”, and “As a portrayal of a waiter-customer interaction, this scenario is believable”), and the participants’ capacity to assume the role of customer (“I was able to adopt the role of the customer portrayed in the scenario”). Two items assessed the adequacy of the manipulation of each of the independent variables. Examples are: “The unavailability of the ‘special’ meal was quite a serious problem” (*Magnitude*), “In this scenario, the staff said they were sorry” (*Apology*), “The staff made an effort to justify the actions of the theme park that led to the problem” (*Justification*), “The staff explained that what happened to me was not as bad as what would happen to some other customers” (*Referential*), and “The staff explained that the theme park was not to blame for the misunderstanding” (*Excuse*).

Satisfaction with the recovery and the four dimensions of justice were each measured using three items. The items measuring *satisfaction with the recovery* included one item from each of Goodwin and Ross (1992), and Webster and Sundaram (1998), and one written for this study. The items measuring *distributive* justice were based on Blodgett et al. (1997); those measuring *procedural* justice came primarily from Bobocel et al. (1998); those assessing *interpersonal* justice were from

several sources, especially Smith, Bolton, and Wagner (1999); and the items measuring *informational* justice were worded to reflect the components of the conceptual definition proposed by Greenberg (1993).

Procedure

All members of the sample were randomly assigned to conditions represented by different combinations of explanation type and magnitude of failure. Data were collected in small (10-30 person) non-interacting groups. Participants were instructed to read the scenario, imagine that they were the customer, and respond to the questions regarding how they were likely to think, feel and act when in such circumstances. All responses were anonymous.

Results

Descriptive Statistics

Responses to all items measuring common constructs were averaged to form composite scales. In each case, higher scores indicate higher levels of the relevant construct. Table 1 gives the means, standard deviations and alpha reliability coefficients for the study variables. All scales displayed good to very good reliability, except the two-item scales used to check the manipulations of failure magnitude, justification and excuse (where alphas ranged from .58 to .66). Table 1 also shows the correlations between the variables. The pattern of correlations was broadly as expected. The main dependent variable (satisfaction) was highly correlated with the justice variables but not with the perceived explanation measures.

Take in Table 1 about here

To verify the factorial structure of the items intended to measure satisfaction and the four justice variables, a Confirmatory Factor Analysis (CFA) assessed the fit to the data of the hypothesized five-factor model. In this (and all other CFAs), each of the 15 items intended to measure one of the dependent variables was forced to load on its latent factor, no cross-loadings were permitted, the variance of all latent factors was constrained to unity to permit scaling, and all factors, but no error terms, were permitted to covary. As expected, given the non-normal item distributions and relatively large sample size, the chi square value was significant, but values for other fit indices were within recommended ranges, $\chi^2(80) = 187.1, p < .001$, Non-Normed Fit Index = .98, Comparative Fit Index = .99, Standardized Root Mean Square Residual = .03, indicating a very good overall fit for this factor structure.

A series of CFAs compared the fit of the five-factor model with that of several rival models. These other models were derived either from justice theory or from the pattern of correlations observed in the current data set. The chi-square difference test revealed that the five-factor model provided a superior fit ($p < .001$) to that of any of the alternatives tested: $\Delta\chi^2$ values ranged from 71.6 (for the comparison involving a four-factor model that combined interactional and informational justice) to 519.6 (for the comparison involving a single-factor model). Thus, the findings supported the view that the set of 15 items measured five correlated, yet distinct, dimensions.

Realism and Manipulation Checks

Checks of the realism of the scenarios revealed that respondents generally believed that “there are service problems like this in real life” ($M = 6.35, SD = 0.74$), that “the scenario was believable” ($M = 5.96, SD = 1.07$), and that they were “able to adopt the role of the customer” ($M = 5.98, SD = 0.92$). One sample t-tests showed

that each of these sample means was significantly ($p < .0005$) greater than the scale mid-point of 4.

The efficacy of the service failure magnitude manipulation was tested using a 5 (explanation) x 2 (magnitude) between-subjects Analysis of Variance (ANOVA), with perceived magnitude as the dependent variable. As expected, there was a significant main effect associated with the magnitude manipulation, $F(1, 420) = 22.67, p < .0005$, partial $\eta^2 = .051$, but not for explanation, $F(4, 420) = 1.56, p = .185$, partial $\eta^2 = .015$. The Magnitude x Explanation Type interaction was not significant, $F(4, 420) = 0.50, p = .739$, partial $\eta^2 = .005$. Ratings of perceived magnitude were higher in the high ($M = 3.61, SD = 1.17$) than in the low ($M = 3.06, SD = 1.29$) magnitude condition.

The efficacy of the explanation type manipulation was tested using a 5 (explanation) x 2 (magnitude) between-subjects multivariate analysis of variance (MANOVA), with the perceived explanation measures as the dependent variables. This MANOVA revealed a significant multivariate main effect for the explanation manipulation, $F(16, 1274.6) = 46.67, p < .0005$, partial $\eta^2 = .297$. Univariate tests revealed that the effect of the explanation manipulation was significant on all four dependent variables: apology, $F(4, 420) = 34.8, p < .0005$, partial $\eta^2 = .249$, justification, $F(4, 420) = 16.6, p < .0005$, partial $\eta^2 = .137$, referential, $F(4, 420) = 98.7, p < .0005$, partial $\eta^2 = .484$, and excuse, $F(4, 420) = 25.9, p < .0005$, partial $\eta^2 = .198$. Follow-up ANOVAs, with planned contrasts, indicated that participants who received each of the explanation types were significantly ($p < .0005$) more likely than those receiving other types of explanation to agree that the particular explanation they had received was present in the scenario they read.

Effects of Explanation Type and Failure Magnitude

Hypothesis 1 predicted a main effect of explanation type on satisfaction with recovery and on the four justice dimensions. Hypothesis 2 predicted an interactive effect of explanation type and failure magnitude on the same dependent variables. Effects on satisfaction were tested using a 5 (explanation type) x 2 (magnitude) between-subjects ANOVA. Effects on the four justice dimensions were tested using a 5 (explanation type) x 2 (magnitude) between-subjects MANOVA.

The ANOVA with satisfaction as the dependent variable revealed significant main effects for both independent variables: explanation type, $F(4, 420) = 2.90, p = .022$, partial $\eta^2 = .027$, and magnitude, $F(1, 420) = 103.07, p < .0005$, partial $\eta^2 = .197$, but no significant interaction, $F(4, 420) = 0.87, p < .726$, partial $\eta^2 = .005$. Post hoc (Tukey HSD) tests revealed that only one pair of explanation types resulted in significantly different levels of satisfaction: apologies (mean = 4.92, SD = 1.43) produced greater satisfaction than did referential accounts (mean = 4.28, SD = 1.50). Satisfaction levels associated with the other three types of explanation fell between these extremes: excuse (mean = 4.66, SD = 1.43), justification (mean = 4.56, SD = 1.42), and no explanation (mean = 4.53, SD = 1.50). Inspection of the cell means indicated that greater satisfaction was reported following low than high magnitude service failures (means (SDs) = 5.23 (1.40) and 3.96 (1.46), respectively).

Results from the MANOVA with the four justice measures as dependent variables are summarized in Table 2. As can be seen, contrary to hypothesis 2, the multivariate interaction effect was not significant, but the multivariate main effects for both explanation type and failure magnitude were significant. Univariate analyses revealed that explanation type affected perceptions of interpersonal and informational justice only. Post hoc tests showed that (a) receipt of an apology resulted in greater perceived interpersonal justice than did receipt of all explanation types other than an

excuse, and (b) receipt of a referential account resulted in lower perceived informational justice than did receipt of all other explanation types (and similar levels of informational justice as receipt of no explanation). Univariate tests also revealed that failure magnitude had significant effects on all four types of justice, with higher levels of perceived justice evident after a low, rather than a high, magnitude failure.

Take in Table 2 about here

In sum, these findings support hypothesis 1 (main effect of explanation type), but not hypothesis 2 (interaction of explanation type and failure magnitude).

Mediation Analyses

Hypothesis 3 predicted that the relationships between each of the four types of explanation and customer satisfaction would be mediated by specific justice variables. Baron and Kenny's (1986) method involving three regression equations was used to test this hypothesis. The measures of perceived explanation types were the predictors, and satisfaction was the criterion. Equation 1 tested whether the explanation type predicted the criterion; equation 2 assessed whether the explanation type predicted the hypothesized mediator (i.e., the nominated type of justice); and equation 3 tested whether the explanation type predicted the criterion *less well* when the mediator was included as a second predictor compared to when explanation was the sole predictor (as in equation 1).

Results of these analyses are summarized in Table 3. As can be seen, in the first equation, all four explanation types predicted satisfaction (although this

relationship was negative in the case of referential accounts). In equation 2, as hypothesized, excuse predicted procedural justice, justification predicted informational justice, and apology predicted interpersonal justice. However, the perceived use of referential accounts did not significantly predict distributive justice. Thus, there was no significant relationship between the predictor (referential accounts) and the hypothesized mediator (distributive justice); hypothesis 3b was not supported (and there was no need to perform the third equation relating to this hypothesis). Equation 3 demonstrated that the strength of the relationships between apology and satisfaction, justification and satisfaction, and excuse and satisfaction were each substantially reduced when the nominated justice variable was included as a second predictor of satisfaction. These findings support the mediation relationships specified in hypotheses 3a, 3c and 3d, respectively.

Take in Table 3 about here

To explore the possibility that the effects of the four explanations on satisfaction were mediated by types of justice other than those hypothesized, 12 additional mediation analyses were conducted (i.e., one for each possible combination of explanation and justice type not previously tested). Results revealed that (a) the effect of referential accounts on satisfaction were not mediated by any type of justice, (b) the effect of excuse was additionally mediated by informational justice ($\beta_{\text{excuse}} = .11, p < .0005$, when the sole predictor of satisfaction, and $\beta_{\text{excuse}} = .02, p = .571$ when informational justice was added as a second predictor), (c) the effects of justification

was additionally mediated by procedural justice ($\beta_{\text{justification}} = .38$, $p < .0005$, when the sole predictor, and $\beta_{\text{justification}} = .05$, $p = .119$ when procedural justice was added), and (d) the effects of apology was not mediated by any type of justice (other than by interactional justice, as already reported).

Discussion

This is one of few studies to investigate the relative efficacy of four different types of explanations following service failure. It is the first to examine relationships between these explanation types and different kinds of justice within this context. We found small, but significant, effects of explanation type on both recovery satisfaction and perceived justice. Overall, the use of apologies resulted in the most favourable set of outcomes. After receipt of an apology, satisfaction ratings were significantly higher than after receipt of a referential account. Significant effects of apologies were also evident in respect of perceived interpersonal and perceived procedural justice: apologies resulted in higher ratings of interpersonal justice than did all other explanation types except excuses, and higher ratings of procedural justice than did referential accounts. Whilst past findings regarding the efficacy of apologies have been mixed (Bobocel & Zdaniuk, 2005; Davidow, 2003), the current research suggests that, in service failure/recovery situations such as the present, apologies have positive, albeit not overly-strong, effects on key cognitive and affective outcomes.

In contrast to the favourable outcomes resulting from the use of apologies, exposure to referential accounts (of the “you could have been even worse off” kind) yielded evaluations of satisfaction and all four types of justice that were not significantly different from the evaluations that followed no explanation at all! These findings are rather surprising given past evidence (see, e.g., Sitkin & Bies, 1993) as to

the efficacy of this type of account. Sparks and Fredline (2007), for example, compared the effects justifications and referential accounts using a written scenario of a service failure in a travel/hospitality context and found referential accounts to yield higher levels of customer satisfaction. The discrepancy between that and the current results may be due to two factors. First, in Sparks and Fredline's study, the effect was present only under conditions of high service failure magnitude. Perhaps the levels of failure magnitude, even in our high magnitude condition, were not sufficient to fully realize the effect. Second, whilst the current study included apologies as a separate type of account, Sparks and Fredline's two account types both included an apology as well. The findings are thus not necessarily contradictory: it is plausible that a referential account is more efficacious than a justification, but only when both are accompanied by an apology.

Contrary to hypothesis 2, there was no significant interaction between explanation type and failure magnitude on satisfaction or on any of the justice variables. Past researchers have quite consistently found that these variables do interact, although the direction of the obtained effect has varied between studies. Perhaps, in reality, some factors (e.g., sharper attentional focus) operate to *increase* differences between explanation types with increasing problem magnitude, whilst other factors (e.g., poorer capacity to discriminate) operate to *reduce* differences between explanation types with increasing magnitude. The net result, at least in the present context, is a finding of significant main effects for each of explanation type and failure magnitude, but no significant interaction. Alternatively, as Folger and Cropanzano (1998) have proposed, and Bies (1987) implies, the effect of magnitude on the relationship between explanation type and satisfaction may be curvilinear. Clearly, there is scope for further research relating to this issue.

Consistent with hypothesis 3, perceptions of justice mediated the effects of the explanations on customer evaluations. As hypothesized, the effects for apologies were mediated by interpersonal justice, those of justifications were mediated by informational justice, and those of excuses were mediated by procedural justice. The finding that interpersonal and informational justice mediate the effects of different types of explanations adds to the accumulating evidence supporting the theoretical and empirical separation of these two forms of justice (Colquitt, 2001; Colquitt et al., 2001; Greenberg, 1993).

Mediation effects were not, however, entirely as expected. First, the effects of referential accounts were not mediated by perceived distributive justice. In part, this null finding reflects the relatively weak main effects associated with this explanation type. Future researchers may need to use a stronger (i.e., more persuasive) referential account, and may wish to investigate the mediating effects of variables not currently measured (such as attribution or expectancy disconfirmation variables). Second, two of the explanation types – justifications and excuses – were not mediated solely by the hypothesized form of justice. Indeed, both of these explanation types were mediated by both procedural and informational justice. This is an interesting, and novel, finding. It is possible that the dual role of informational and procedural justice in mediating the effects of the justification resulted in part from a perception that the justification was given as a reflection of formal organizational policy. Likewise, in blaming an outside agency and thereby exonerating the firm's own internal procedures, the excuse provided background information that enhanced participant perceptions of informational justice. Future research could attempt to provide clearer differentiation of these explanation types (i.e., a less formal and more spontaneous justification, and a less informative excuse) to further test these relationships.

Limitations

This paper reports a single study that used a hypothetical service scenario. The strengths of the scenario method (e.g., the level of control it provides, the advantages it has over other methods from an ethical and resource utilization viewpoint) are well known. So too are its limitations. Although we took steps to confirm that participants found the scenarios realistic and that participants were able to readily adopt the role of the customer in each scenario, we cannot be certain that responses similar to the ones reported here would be evident following a naturally-occurring service failure. The sample comprised undergraduate students. Whilst it seems likely that this (relatively well-educated and homogenous) group may perceive justice differently, and experience different levels of satisfaction, compared to the broader non-student population, we know of no good reason in theory why *the relationship between the study variables* would be systematically biased by the use of this sample. (Why, for example, would the role played by interpersonal justice in mediating the apology-satisfaction relationship be any different in the non-student population?). It is true, however, that findings from our research require replication using other samples, measures, and service settings. It remains possible that the findings may not generalize beyond the service context and problem type currently studied or, indeed, to actual customers in real-life service encounters. Finally, the study would have benefited from measures of satisfaction and the four types of justice that have higher levels of discriminant validity, and scales to check on the manipulations of three of the independent variables that are more reliable.

Managerial Implications

Notwithstanding these limitations, our study has several implications for travel and tourism industry managers. The study has provided fresh evidence that, following

a service failure, apologies are appreciated by aggrieved customers. In particular, our findings remind service providers that apologies are likely to result in higher levels of satisfaction, and higher ratings of interpersonal justice, than do referential accounts. Whilst this finding is not unexpected, it has not been previously demonstrated in service failure/recovery research comparing the four types of explanation. And whilst, it may appear like “common sense”, in reality, apologies are not universally given. Travel and tourism firms need to encourage staff to apologize for service mishaps, and need to train them to do so in ways that connote empathy and sincerity (McColl-Kennedy & Sparks, 2003).

The study has also shed light on the processes through which three of the four explanation types have their effects on satisfaction. This knowledge of the mechanisms by which explanations affect customer evaluations has several potential applications for effective service recovery practices. For example, the knowledge may be useful when designing explanations for maximum effectiveness: our findings suggest that apologies need to be worded in ways that engender high levels of interpersonal justice, justifications need to satisfy recipients’ needs for informational justice and procedural justice, and so on. This knowledge about intervening mechanisms may also be useful for understanding the partial success of recovery attempts and for pinpointing where, within the causal chain, a particular recovery strategy fails. In addition, the findings may be applied in training staff for complaint handling. By acquiring knowledge of the workings of different recovery strategies, staff may be able to select and deliver more effective recovery tactics.

Future Research

The current research can be extended in several ways. For example, future research could usefully explore the role of additional mediating and contextual

variables. Folger and Cropanzano's (1998) fairness theory, for example, suggests that the efficacy of the explanation types depends on their capacity to trigger, or to preempt, counterfactual thinking. To test this idea, future research could include measures of the counterfactual thoughts that follow receipt of each of the explanation types. Also, behavioural outcome measures could be included to complement the current cognitive/affective variables. Davidow (2003), for example, has suggested that apologies have more favorable effects on immediate judgments such as fairness perceptions than on more distal outcomes such as repurchase. Propositions such as this are best tested using behavioral measures. Recognising that, in reality, explanations often exist in "mixed" rather than "pure" forms, other research could investigate the efficacy of different combinations of explanation types. It may well be that some combinations are more efficacious than any of the pure types currently under investigation. And, of course, the research needs to be taken out of the "laboratory", so that customers' reports of responses to real explanations can be compared to the responses obtained in the current study using highly-controlled scenario stimulus materials.

Conclusions

The use of explanations is a common, low-cost, yet under-researched, strategy for recovering from service failure. We believe this is the first service failure/recovery study to compare the efficacy of four of the most widely-practised explanation types, and more particularly, the first to examine links between these four types of explanation and four types of justice. The study demonstrated that the explanation types vary in effectiveness, although the differences may be small relative to the effect of other factors impacting service recovery. It has also shed light on the processes through which different types of explanations have their effects. Further

research is required to explore the robustness of the current findings, and to identify additional factors that shape (and can be used to enhance) the efficacy of explanations in service failure and recovery contexts.

References

- Adams, J.S. (1965). Inequity in social change. In L. Berkowitz (Ed.), *Advances in experimental social psychology: Volume 2* (pp.267-299). New York: Academic Press.
- Baer, R., & Hill, D. J. (1994). Excuse making: A prevalent company response to complaints? *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviour*, 7, 143-151.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behaviour. Volume 9* (pp. 289-319). New York: JAI Press.
- Bies, R. J., & Moag, J. S. (1986). Interaction justice: Communication criteria of fairness. In R. Lewicki, B. Sheppard & B. H. Bazerman (Eds.), *Research on negotiation in organizations* (pp.43-55). Greenwich, CT: JAI Press.
- Bies, R. J., Shapiro, D. L, & Cummings, L. L. (1988). Causal accounts and managing organizational conflicts: It is enough to say it's not my fault? *Communications Research*, 15, 381-399.
- Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on postcomplaint behaviour. *Journal of Retailing*, 73, 185-210.
- Bobocel, D. R., Agar, S. E., Meyer, J. P., & Irving, P. G. (1998). Managerial accounts

and fairness perceptions in conflict resolution: Differentiating the effects of minimizing responsibility and providing justification. *Basic and Applied Social Psychology*, 20,133-143.

Bobocel, D. R., & Zdaniuk, A. (2005). How can explanations be used to foster organizational justice? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice* (pp.469-498). Mahwah, NJ: Lawrence Erlbaum.

Bowen, D. E., Gilliland, S. W., & Folger, R. T. (1999). HRM and service fairness: How being fair with employees spills over to customers. *Organizational Dynamics*, 27, 7-23.

Chan, H., Wan, L. C., & Sin, L. Y. M. (2007). Hospitality service failures: Who will be more dissatisfied? *International Journal of Hospitality Management*, 26, 531-545. doi:10.1016/j.ijhm.2006.02.004.

Clemmer, E. C. (1993). An investigation into the relationship of fairness and customer satisfaction with services. In R. Cropanzano (Ed.), *Justice in the workplace: Approaching fairness in human resource management* (pp.193-207). Hillsdale, NJ: Erlbaum.

Collie, T., Bradley, G. L., & Sparks, B. A. (2002). Fair process revisited: Differential effects of interactional and procedural justice in the presence of social comparison information. *Journal of Experimental Social Psychology*, 38, 545-555.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400. doi: 10.1037/0021-9010.86.3.386.

- Colquitt, J. A., & Chertkoff, J. M. (2002). Explaining injustice: The interactive effects of explanation and outcome on fairness perceptions and task motivation. *Journal of Management*, 28, 591-610.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O.L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-445. doi: 10.1037/0021-9010.86.3.425.
- Conlon, D. E., & Murray, N. M. (1996). Customer perceptions of corporate responses to product complaints: The role of explanations. *Academy of Management Journal*, 39, 1040-1056.
- Conlon, D. E., & Ross, W. H. (1997). Appearances do count: The effects of outcomes and explanations on disputant fairness judgments and supervisory evaluations. *The International Journal of Conflict Management*, 8, 5-31.
- Davidow, M. (2003). Organizational responses to customer complaints: What works and what doesn't. *Journal of Service Research*, 5, 225-250. doi: 10.1177/1094670502238917.
- Duffy, J. A. M., Miller, J. M., & Bexley, J. B. (2006). Banking customers' varied reactions to service recovery strategies. *International Journal of Bank Marketing*, 24(2), 113-132.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage.
- Goodwin, C., & Ross, I. (1992). Consumer responses to service failures: Influence of procedural and interactional fairness perceptions. *Journal of Business Research*, 25, 149-163.
- Greenberg, J. (1993). The social side of fairness: Interpersonal and informational

- classes of organisational justice. In R. Cropanzano (Ed.), *Justice in the workplace: Approaching fairness in human resource management* (pp. 79-103). Hillsdale, CA: Lawrence Erlbaum.
- Johnston, R., & Fern, A. (1999). Service recovery strategies for single and double deviation scenarios. *The Service Industry Journal*, *1*, 69-82.
- Karatepe, O. M. (2006). Customer complaints and organizational responses: The effects of complainants' perceptions of justice on satisfaction and loyalty. *Hospitality Management*, *25*, 69-90. doi: 10.1016/j.ijhm.2004.12.008
- Liao, H. (2007). Do it right the first time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures. *Journal of Applied Psychology*, *92*, 475-489. doi: 10.1037/0021-9010.92.2.475
- Mattila, A. S. (2006). The power of explanations in mitigating the ill-effects of service failures. *Journal of Service Marketing*, *20*, 422-428. doi: 10.1108/08876040610704856
- McColl-Kennedy, J. R., & Sparks, B. A. (2003). Application of fairness theory to service failures and service recovery. *Journal of Service Research*, *5*, 251-266. doi: 10.1177/1094670502238918.
- Shapiro, D. L. (1991). The effects of explanations on negative reactions to deceit. *Administrative Science Quarterly*, *36*, 614-630.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse? A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, *88*, 444-458. doi: 10.1037/0021-9010.88.3.444.
- Sitkin, S. B., & Bies, R. J. (1993). Social accounts in conflict situations: Using explanations to manage conflict. *Human Relations*, *46*, 349-370.

- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research, 36*, 356-372.
- Sparks, B. A., & Callan, V. J. (1996). Service breakdowns and service evaluations: The role of customer attributions. *Journal of Hospitality and Leisure Marketing, 4*, 3-24.
- Sparks, B. A., & Fredline, E. (2007). Providing an explanation for service failure: Context, content and customer responses. *Journal of Hospitality and Tourism Research, 31*, 241-260. doi:10.1177/1096348006297292.
- Starlicki, D. P., Folger, R., & Gee, J. (2004). When social accounts backfire: The exacerbating effects of a polite message or an apology on reactions to unfair outcome. *Journal of Applied Social Psychology, 34*, 322-341.
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing, 62*, 60-76.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*, Hillsdale, NJ: Lawrence Erlbaum.
- Webster, C., & Sundaram, D.S. (1998). Service consumption criticality in failure recovery. *Journal of Business Research, 41*, 153-159.
- Willson, P., & McNamara, J. R. (1982). How perceptions of a simulated physician-patient interaction influence intended satisfaction and compliance. *Social Sciences and Medicine, 16*, 1699-1704.
- Wirtz, J., & Mattila, A. S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. *International Journal of Service Industry Management, 15*, 150-166. doi: 10.1108/09564230410532484.

Worsfold, K., Worsfold, J., & Bradley, G. L. (2007). Interactive effects of proactive and reactive service recovery strategies: The case of rapport and compensation. *Journal of Applied Social Psychology, 37*(11), 2496-2517.

Table 1

Descriptive Statistics and Correlations between Study Variables

Variable	Mean	SD	Alpha ^a	1	2	3	4	5	6	7	8	9
1. Failure Magnitude	3.33	1.26	.58									
2. Apology	3.76	1.80	.86	-.08								
3. Justification	4.55	1.48	.62	-.20	.27							
4. Referential	2.54	1.45	.78	.07	-.01	-.04						
5. Excuse	4.22	1.54	.66	-.06	.01	.21	.05					
6. Distributive Justice	4.88	1.41	.92	-.28	.27	.33	-.08	.07				
7. Procedural Justice	4.95	1.28	.88	-.30	.32	.41	-.06	.12	.84			
8. Interpersonal Justice	4.68	1.31	.89	-.31	.48	.32	-.06	.04	.62	.71		
9. Informational Justice	4.39	1.30	.78	-.26	.36	.49	-.08	.18	.61	.72	.68	
10. Satisfaction with Recovery	4.60	1.46	.91	-.31	.38	.38	-.11	.11	.83	.84	.78	.69

Note: $p < .05$ if $r \geq .09$; $p < .01$ if $r \geq .12$; and $p < .001$ if $r \geq .15$. ^a Alpha reliability coefficients.

Table 2

Summary Findings from Explanation Type x Failure Magnitude MANOVA on Four Types of Justice

Source	Multivariate		Outcome	Univariate	
	<i>F</i> (df)	partial η^2		<i>F</i>	partial η^2
Type of Explanation	3.40*** (16, 1276)	.031	Distributive	0.85	.008
			Procedural	2.15	.020
			Interpersonal	5.43***	.049
			Informational	5.09***	.046
Magnitude of Failure	22.48** (4, 417)	.177	Distributive	78.85***	.158
			Procedural	46.91***	.100
			Interpersonal	46.28***	.099
			Informational	45.81***	.098
Explanation Type x Magnitude	0.62 (16, 1275)	.006			

* $p < .05$ ** $p < .01$ *** $p < .001$ (after Bonferroni adjustments to univariate effects)

Table 3

Summary of Explanation Type – Justice – Satisfaction Mediation Analyses

Hypothesis	Equation 1	Equation 2	Equation 3
3a	Apology → Satisfaction $\beta_{\text{apology}} = .38, p < .0005$	Apology → Interpersonal Justice $\beta_{\text{apology}} = .48, p < .0005$	Apology + Interpersonal Justice → Satisfaction $\beta_{\text{interpersonal justice}} = .77, p < .0005$ $\beta_{\text{apology}} = .01, p = .723$
3b	Referential → Satisfaction $\beta_{\text{referential}} = -.11, p = .027$	Referential → Distributive Justice $\beta_{\text{referential}} = .08, p = .086$ (ns)	
3c	Justification → Satisfaction $\beta_{\text{justification}} = .38, p < .0005$	Justification → Informational Justice $\beta_{\text{justification}} = .49, p < .0005$	Justification + Informational → Satisfaction $\beta_{\text{informational justice}} = .67, p < .0005$ $\beta_{\text{justification}} = .05, p = .198$
3d	Excuse → Satisfaction $\beta_{\text{excuse}} = .11, p = .027$	Excuse → Procedural Justice $\beta_{\text{excuse}} = .12, p = .015$	Excuse + Procedural Justice → Satisfaction $\beta_{\text{procedural justice}} = .84, p < .0005$ $\beta_{\text{excuse}} = .01, p = .775$

Appendix: Generic Version of the Scenario

You and a friend are about to commence a day trip to one of the local theme parks. The trip is part of a package arranged by the Student Guild. First, you stop at the campus office of the Guild to pick up vouchers for the theme park. Then, you drive to the park where you spend most of the morning enjoying some of the rides. Eventually, you decide to stop for lunch at the main restaurant. This restaurant is operated by the theme park management, and is located right in the centre of the park. As part of the arrangement with the park, the Student Guild has given you a lunch coupon that allows you to buy a special “student platter” meal for a low \$8. Meals normally cost at least \$10, and, according to the Student Guild promotion, this special meal includes lots of delicacies as well as an exotic fruit drink. When you go to order the meal, the following occurs:

The attendant smiles and asks, "What would you like?"

"I have this coupon for the special “student platter” meal - I'd like to order that please".

The attendant inspects the coupon and says, "Oh, these are out of date - we stopped taking them last month. You can see that the use-by date is written right here (pointing) on the back of the coupon. That was over two weeks ago".

"But the coupon is part of the package that we picked up this morning! We're from the uni, and our Student Guild organized them especially with the theme park for us to use today," you reply emphatically.

At this point, the attendant says, "Well, all the other parts of the student package – the cheap entry, the discounted merchandise, and so on – are still available until the end of this week. It's just the special meal that is no longer available. That was a special promotion for last month only Look, I'll go and get my supervisor to talk to you"

In less than a minute, the supervisor appears, and says, “Sam has told me about the problem. I'm afraid the theme park management is clear on this: the special meal offer has definitely expired. *Explanation (or no explanation) appears here, exactly as worded in the paper.* Can we get you something else instead?"

“Well,” you say, “I was really looking forward to the special platter. Are any of the dishes from the special available today?"

High or low severity manipulation appears here, exactly as worded in the paper.

You and your friend discuss what to do. Eventually, you both order what the supervisor has recommended. Even though the special meal was going to cost \$8, you have to pay the normal price, \$12, for the meals you order. You take a seat, and wait for your food to arrive.

You and your friend eat the meal quickly. It tastes really good [*low severity*] / pretty bad [*high severity*]. When you finish, you chat for a while before spending the afternoon having more rides. Eventually, you visit the theme park's souvenir store, buy some bits and pieces, and then head off home.