"We(b) care" : how review set balance moderates the appropriate response strategy to negative online reviews

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Abstract

Purpose: Consumers increasingly discuss brands and companies online. Yet research has not sufficiently examined how a service provider’s response to these online reviews influences the perceptions of other potential customers reading these reviews and the according response. Drawing from justice theory and the accountability principle, both integrated in equity theory, we investigate whether and how a service provider (in this case, a restaurant) should react to different degrees of negative online reviews to positively influence review readers’ attitudes, patronage intention and the intention to spread positive word-of-mouth (PWOM intention) as prospective customers.

Design/methodology/approach: We set up a 3 (review set balance: positive, neutral, negative) x 6 (response strategy) full-factorial between-subjects experiment with 973 respondents.

Findings: The more negative the balance, the more effort is required from the service provider to create positive attitudes and encourage behavioral intentions. When there is only a minority who is dissatisfied with the service provider, no response is necessary. When there are equal amounts of people who are satisfied and dissatisfied with the service provider, apologizing and promising that the problem will not happen again is most effective. This effect is mediated by readers’ perceived trust in the managerial response. In case of a dissatisfied majority, apologizing, promising and offering a compensation is most effective. More effort is also needed to stimulate PWOM intention from readers than to engender a favorable attitude or patronage intention.

Research limitations/implications: Through appropriate response strategies, brand managers can effectively counter negative online reviews, even when the majority of reviewers are negative. The research is limited by the choices made in terms of review set balance and managerial responses to ensure the internal validity of the research. This may limit the external validity.

Originality/value: The research for the first time applies offline service recovery strategies to the online review context. The study is also the one of the first to explicitly incorporate the bystander (potential customer) perspective.
Introduction

The advancing technologies and recent developments in communication media has led consumers to increasingly share their stories and experiences about products and services online (Park and Park, 2013). Consumers talk about brands and companies online both in a positive (“I tried this product and I like it”) and in a negative way (“I went to this restaurant and the service was awful”). Research shows that electronic word-of-mouth (eWOM) affects the consideration sets, attitudes toward the object and behavioral intentions of review readers, and ultimately sales (Chevalier and Mayzlin, 2006; Dellarocas et al., 2007; Doh and Hwang, 2009; Schindler and Bickart, 2005). Negative online reviews, in particular, have received considerable attention, both from scholars and practitioners (e.g., Eisingerich et al., 2011; Sen and Lerman, 2007). Research indicates that negative reviews can harm a company’s brand image and reputation, as well as consumers’ attitudes and patronage intentions (e.g., Chiou and Cheng, 2003; Lee and Youn, 2009). As complaints are no longer expressed in one-to-one communication, but are publicly shared on social network sites, review sites and other media, one of the major challenges for companies today is to develop appropriate response strategies to negative eWOM (Hennig-Thurau et al., 2010) and to recover consumers’ patronage after a negative service encounter (Berger et al., 2009; Evans et al., 2012; Munzel and Kunz, 2014).

In an attempt to mitigate the negative effects of online complaints, companies have started to monitor and intervene in negative eWOM (Fournier and Avery, 2011; Salampasis et al., 2014), which is referred to as webcare (Van Noort and Willemsen, 2012). However, empirical research shows mixed findings on the effectiveness of webcare. Where some studies show that webcare can increase consumer loyalty, satisfaction and positive eWOM (Wangenheim and Bayon, 2004), others find that this is not always the case. For example, Lee and Song (2010) propose that interventions following negative eWOM also lead to higher attributed responsibility for a negative event, which in turn leads to more negative firm evaluations. Because of the risk of backfiring effects, both practitioners and academics call for research on appropriate response strategies to counter negative eWOM effects (e.g., Reichelt et al., 2014; Van Noort and Willemsen, 2012).

The present study seeks to address this call. Drawing on justice theory (Gelbrich and Roschk, 2011; Tax et al., 1998), and the accountability principle (McColl-Kennedy and Sparks, 2003), both integrated in equity theory (Adams, 1965; Palmer et al., 2000), the present study attempts to provide a better understanding of prospective customers’ attitudes and behavioral intentions following managerial responses to sets of online reviews varying in their degree of negativity. We experimentally test the effect of six managerial response strategies (refutation, no response, apology only, apology plus prospective explanation (promising that it won’t happen again), apology plus compensation, apology plus prospective explanation plus compensation) drawn from offline service recovery literature (Benoit, 1995; Davidow, 2003; Gelbrich, 2010; Johnston and Mehra, 2002) on prospective customers’ reactions in terms of attitude toward the service provider, patronage intention, and positive WOM intention. We focus on these six response strategies as they are most common in practice, while academics have not reached a consensus regarding their effectiveness (Evans et al., 2012). Furthermore, we also study the moderating role...
of review set balance on review readers’ reactions. Review set balance represents the opinion of other people and is defined as the ratio of positively and negatively valenced reviews about the same object (Purnawirawan et al., 2012a). It is essential to examine the moderating role of review set balance because readers rely heavily on other people’s opinions (MarketingCharts, 2013; Purnawirawan et al., 2012b). We argue that review set balance helps readers to assign accountability and assess the fairness of the situation.

The study contributes to existing knowledge in a number of ways. First, we provide a better understanding of whether, and if so, under what circumstances (balance conditions) and how service providers should react to negative online reviews. Second, we extend offline recovery theories to an online setting. Third, as argued by Orsingher, Valentini, and de Angelis (2010), research on recovery should include a comprehensive set of metrics (including WOM intention), not only to obtain a more comprehensive picture regarding the underlying relationships, but also to increase the practical relevance of complaint management. Therefore, we include both attitudinal and behavioral response variables and study how review readers’ attitude, patronage intention and positive WOM intention are mediated by their perceived trust in the response.

Finally, we apply a bystander point of view, instead of the dissatisfied customer’s perspective. A bystander can be defined as a third party who did not suffer from bad service performance him- or herself, but who observes a service failure (e.g., a review reader, another customer present during the service failure, an observer, a prospective customer). This is a relevant perspective as most Internet users are bystanders. The offline service recovery literature has largely focused on converting the victimized customer. However, recent research in an offline setting has shown that bystanders’ attitudes and behavioral intentions are also affected by their observations of a service recovery (Van Vaerenbergh et al., 2013). It is therefore important to understand how prospective customers respond to different response strategies to online reviews. This way, service providers can attempt to recover prospective customers. A successful recovery can create a feeling of trust, reduce uncertainty and vulnerability among both complaining and observing customers (Kimmel, 2010), which ultimately, allows service providers to gain new customers and prevent loss of sales and profits.

Literature review and hypotheses development

Even in organizations that aim for 100 per cent service quality, failures can occur in a variety of ways (Wilson et al., 2008). When failure happens, dissatisfied customers are likely to share their negative experiences, engage in negative WOM and write negative online reviews (Kau and Loh, 2006). Given that people rely heavily on online reviews to make their purchase decision (Ante, 2009; Hennig-Thurau et al., 2010; MarketingCharts, 2013), negative reviews negatively affect readers’ attitude toward the service provider and discourage prospective customers from buying or using the service. In addition, negative reviews may encourage people to talk negatively or prevent them from talking positively about the service provider.

Offline service recovery theories have established that customer satisfaction after a service recovery depends on customers’ perceptions of justice and locus of accountability (i.e. the
perceived causes of success or failure) (Ostrom and Iacobucci, 1995; Swanson and Kelley, 2001). Customers’ justice perception is the extent to which customers perceive that they have been treated fairly compared to other customers and that the recovery effort is in balance with the suffered failure. Justice perceptions can be classified into three dimensions, i.e. distributive, interactional and procedural, all of which have been shown to influence consumers’ post-recovery satisfaction levels. Distributive justice is related to outcome failure and can be recovered by offering the customer a compensation. An apology is associated with interactional justice, while a timely response can enhance satisfaction through the procedural dimension (Tax, Brown, and Chandrashekaran 1998). According to justice theory, a recovery is meant to return the complainers to their starting point before the dissatisfaction (Smith et al., 1999).

One of the fundamental concepts that influences perceived justice is the attribution of accountability. When a failure has occurred, someone is to blame (McColl-Kennedy and Sparks, 2003). Understanding the motives and intentions of the perceived wrongdoer helps the customer shape their justice perception and, consequently, affects their attitude and behavioral intention formation. Andreassen (2000) argues that complaining customers expect an explanation, an apology, a compensation/redress, and a speedy recovery. Similarly, according to (Wilson et al., 2008), complaining customers do not only expecting the organization to be held accountable, but also expect to be helped quickly, to be compensated for their inconveniences and want to be treated nicely in the process.

In the next sections, we discuss different recovery strategies and elaborate on how review balance may influence readers’ responses in terms of attitude, patronage intention and PWOM intention to these recovery strategies. We argue that review balance and managerial response affect readers’ justice perception and their attributions of accountability, and therefore will affect their perceived trust, attitude and behavioral intention formation.

**Service recovery strategies**

When people post negative reviews on the Internet, companies can use several response strategies. Service recovery literature often applies justice theory to guide appropriate responses. Based on a meta-analysis, Gelbrich and Roschk (2011) found that distributive justice and interactional justice are the main drivers of satisfaction and behavioral intentions. While distributive justice involves the allocation of compensation (e.g., discounts, refunds, etc.) by the organization in response to the inequity caused by a service failure (Adams, 1965; Tax et al., 1998), interactional justice involves the manner in which information is exchanged and outcomes are communicated (e.g., accepting responsibility, providing explanation) (Kerkhof et al., 2010). Therefore, the present study mainly focuses on managerial responses related to distributive and interactional justice. Drawing from crisis communication and offline service recovery literature, we distinguish six response strategies depending on whether the organization acknowledges the problem, takes responsibility, and provides the victimized customer a closure or a solution (Benoit, 1995; Davidow, 2003; Johnston and Mehra, 2002). These strategies are shown in Figure 1. Previous research on customer responses to each of these strategies is summarized in Table 1, and briefly discussed hereafter.
First, service providers can opt to not explicitly respond to (negative) online reviews. This has been the standard response strategy for a long time. Some organizations choose not to interfere in web discussions or consumer forums because of their company policy (Schouten, 2007). Others may not reply because they are simply not aware of the reviews, or lack the necessary resources to do so. Research suggests that consumers increasingly expect organizations to respond to negative eWOM (Barone, 2009; Van Noort and Willemsen, 2012). Bitner, Booms, and Tetreault (1990) found that a service provider’s lack of response to complaints is one of the most dissatisfying service experiences. However, this does not mean that an organization necessarily needs to reply to each negative review that is posted. Previous research suggests that review readers tend to follow the majority of reviews (e.g., Purnawirawan et al., 2012b). Therefore, not responding could be appropriate for a service provider in cases where most reviews are positive.

Second, a service provider can refute negative reviews, meaning that he refutes the problem (claims it is untrue) and/or denies (full) responsibility (Benoit, 1995; Coombs, 1998). From a reader’s perspective, this response might be perceived as a negative effort and unfair (Coombs, 1998). The organization only seems concerned with its own interests, and not with the victims’. Research on the impact of refutation has shown mixed findings. On the one hand, some researchers have argued that a refutation strategy can be more successful in rebuilding trust than accepting responsibility (Kim et al., 2004; Riordan et al., 1983; Sigal et al., 1988). However, other studies suggest that refutation communicates a lack of empathy, makes the company less trustworthy, and makes customers rate the problem as more severe than if the company would not respond (Kerkhof et al., 2010; Utz et al., 2009).

Third, an apology signals that the service provider acknowledges that there is a problem and takes responsibility by apologizing (Davidow, 2003). An apology from a service provider communicates concern and empathy to customers who have experienced a service failure (Blodgett et al., 1997) and has a positive effect on consumer responses (Bosshoff and Leong, 1998; Conlon and Murray, 1996; Davidow, 2000; Mack et al., 2000). On the other hand, apology-based service recovery efforts are not always effective in recovering customers (Fang et al., 2013; Kerkhof et al., 2010). In addition, a simple apology is often not enough if it is not used in conjunction with some sort of compensation (Davidow, 2003; Mueller et al., 2003).

Finally, service providers can go beyond apologizing and provide closure or a solution. Closure can be provided by making promises toward the future (that the problem is solved and will not occur again) and/or offering compensation (Johnston and Mehra, 2002). Both can make customers happy, because they feel that the company is making an effort. Several studies have found that offering a compensation can restore trust in the service better than an apology only (Mueller et al., 2003; Wen and Chi, 2013). On the other hand, service recovery efforts do not necessarily require compensation to restore satisfaction after a service failure (Mattila, 2001; Watson, 2012; Wirtz and Mattila, 2004). Additionally, in an online review context, as the
compensation is offered to the duped customer and not to the reader, it is possible that readers of online reviews apply different standards than actual duped customers in evaluating the justice served by the recovery. While a compensation might be more relevant for the customer, a promise that the failure will not occur again will be more relevant for bystanders and future customers who intend to buy or use the service or in order for them to recommend the service to their peers. Therefore, to cover various degrees of service recovery efforts, in the present study we distinguish between apology plus prospective explanation that the failure will not occur again, apology plus compensation and, apology plus prospective explanation plus compensation strategies. When an organization promises that the problem has been fixed, this action takes more customer-oriented effort than, for instance, an apology only, where the organization only takes responsibility, but does not provide a closure. Providing closure in the form of a compensation is then considered as “more effort” than a promise that it will not happen again, because a compensation costs the organization more money than a promise. Providing an apology, a prospective explanation and a compensation then requires the most effort.

The moderating role of review balance

When reading online reviews from other customers, readers are usually confronted with both positive and negative messages. We use the term balance to refer to the ratio of positively and negatively valenced reviews (Purnawirawan et al., 2012b). When the number of positive reviews is, respectively, (clearly) higher than, equal to or (clearly) lower than the number of the negative reviews, the balance is defined as positive, neutral or negative respectively (Purnawirawan et al., 2012b). Thus, balance gives an indication of the majority’s opinion. In this paper, we draw upon equity theory (Palmer et al., 2000) and the accountability principle (Van Vaerenbergh et al., 2013) to argue that the organizational response to online reviews should take the balance of a review set into account.

According to equity theory, exchanges (input versus output) in a relationship should be equal (Adams, 1965). When a service failure occurs, the duped customer experiences an inequity in the exchange, which can be shared by the bystanders. In order to restore a positive relationship with the bystanders (prospective customers), the organization needs to do an effort to restore the inequity with the present customers. For review readers, observing negative events triggers attributions about who is to blame (Cowley, 2005). Depending on the balance of the review set, review readers might attribute the cause of the failure rather to the complaining customer (positive balance) or to the service provider (negative balance) (Weiner, 2000). Based on equity theory, we argue that the more negative the review set balance, the larger the negative inequity is perceived by the bystander, and the more effort the service provider must invest into restoring equity.

When the review balance is positive, meaning that there are more positive than negative reviews, we argue that no response from the organization is necessary. Previous studies found that readers were least likely to visit a restaurant when no response was made to a negative review (Evans et al., 2012). This would imply that providing a response is advisable, because consumers expect organizations to respond to negative eWOM (Van Noort and Willemsen,
However, these studies did not take other people’s positive opinions (review set balance) into account. This is a crucial difference between these previous studies and the present one, because it has been shown that the majority’s opinion strongly affects the formation of attitude and behavioral intention (Chiou and Cheng, 2003; Huang and Chen, 2006; Purnawirawan et al., 2012b; Sparks and Browning, 2011). Thus, when only one or a few customers complain, while the majority of customers express their satisfaction with the service provider, readers are more likely to give the service provider the benefit of the doubt and attribute the accountability of the negative reviews not to the service provider, but to the complaining customer: “some people are just naggers”. Furthermore, as the complaining customers are outnumbered by the satisfied ones, the magnitude and severity of the failure might seem negligible (Kerkhof et al., 2010). Consequently, no effort from the organization is required to counter the (few) negative reviews and to restore the perceptions of justice. As the majority of patrons express their satisfaction with the service, readers may perceive it as fair that the company would not respond.

As we expect most review readers to hold relatively positive opinions of the service provider as a result of the predominantly positive reviews, offering an apology to the dissatisfied customer would not significantly enhance the attitude and behavioral intentions of the reader (e.g., Smith et al., 1999). An apology can, on the one hand, communicate empathy from the organization, but on the other hand also includes an admission of guilt, which implies that the few complainers are right (Kerkhof et al., 2010). Due to the fact that the negative reviews are outnumbered by the positive ones, readers may believe it unlikely that the service failure would reoccur. Therefore, a promise toward the future again holds little additional value. For the same reason, offering a compensation might be regarded as overkill, because the relatively small failure would not require a relatively major effort in the form of a compensation (Tax et al., 1998). As a result of the positive reviews, the service provider may possess a certain amount of equity in the eye of review readers, which buffers the effects of a negative experience (Magnini and Karande, 2009). Thus, additional efforts to restore equity may have little or no effect. Van Vaerenbergh, Vermeir, and Larivière (2013) also pointed out that, when the service provider is not held accountable for the service failure, service recovery attempts have a relatively small impact on the purchase intention of observing customers. Based on the reasoning above, we expect to find no significant differences between the managerial responses in the case of a positive review set balance. We hypothesize:

\[ H1: \text{When the review set balance is positive, no response from the service provider is necessary to enhance review readers’ attitude towards the service provider, patronage intention, and PWOM intention. Different managerial responses do not lead to significant differences in consumer reactions.} \]

When the review set balance is neutral, indicating that there is an equal number of people who are in favor as people who oppose the reviewed object, it is more difficult to assign accountability and thus to evaluate whether justice is served. If bystanders perceive that the service provider may be responsible for the service failure, they may infer that service quality is not always reliable (Michel et al., 2009). In such a case, it would be suboptimal for a company
not to respond. As mentioned, consumers increasingly expect organizations to respond to negative eWOM (Van Noort and Willemsen, 2012), as this signals responsiveness from the service provider (Grewal et al., 2008). Failure to respond illustrates flaws in service quality (Van Vaerenbergh et al., 2013). Refuting the negative reviews would be even worse, as the organization clearly shows it is concerned with its own interests over its customers’ (Coombs, 1998). This communicates a lack of empathy from the part of the service provider, which might enhance the credibility of the negative reviews, resulting in a more negative attitude and a lower behavioral intention of the review reader.

In case of a balanced review set, apologizing can be an appropriate response strategy as it signals empathy (Smith et al., 1999). However, as we already mentioned, apologies can also lead to higher attributed accountability (Lee and Song, 2010) and can increase the perceived severity of the problem (Kerkhof et al., 2010). In a case where the accountability and severity of the service failure are already questionable, this may tip the scale in favor of the negative reviewers, at the detriment of the service provider. In addition, given the fact that the number of dissatisfied customers can no longer be discounted, a simple apology is likely not sufficient to convince prospective customers to buy the service (Davidow, 2003; Mueller et al., 2003; Sparks and McColl-Kennedy, 2001). Therefore, we expect that the service provider should not only apologize, but also explain he is taking action to ensure that the failure will not happen again (Davidow, 2003). Readers as a bystander are then more likely to deduce that they will receive a fair service in the future. From the point of view of a bystander, offering a compensation to duped customers does not provide a direct benefit and lacks sufficient assurance that the problem might not reoccur (Sparks and McColl-Kennedy, 2001). Therefore, we do not expect that a compensation holds an additional benefit over an apology plus prospective explanation. We hypothesize:

**H2:** When the review set balance is neutral, at least an apology by the service provider with a prospective explanation is necessary to enhance review readers’ attitude towards the object, patronage intention, and PWOM intention over other response strategies.

When the review balance is negative, indicating that the majority of customers are dissatisfied, it is obvious that there is a problem for which the service provider should be held accountable. As the complaining customers outnumber the satisfied ones, the magnitude and severity of the failure will seem significant. For the same reasons as mentioned above with the neutral balance (and even more strongly so), no response, refutation and apology only will not result in positive consumer attitudes and patronage intentions. Consequently, more effort from the organization will be required to counter the negative reviews. As many customers have been treated unfairly, duped customers should be compensated to restore the perception of justice. From the point of view of readers, as many customers have been treated unfairly, the probability that the injustice will happen to others (including themselves) is high, which will discourage them from using the service or recommending it to others. In this situation, readers will not only need a promise from the service provider that the problem has been solved, but also need reassurance that they, too, will be compensated should the failure occur again, despite efforts of the company.
Offering a compensation in public engages the service provider to standardize the recovery outcome (a compensation offer to one customer forces the service provider to compensate all other (duped) customers as well), and can serve as a guarantee that future customers will be treated fairly (keeping compensating dissatisfied customers is costly) (Smith et al., 1999; Wirtz and Mattila, 2004). Therefore, we argue that organization response should include a compensation offer, next to an apology and a promise, as this action would be perceived as fair or even desired to restore the inequality of the exchange. We hypothesize:

H3: When the review balance is negative, an apology by the service provider, combined with a prospective explanation and a compensation will more positively impact the attitude towards the object, patronage intention, and PWOM intention than other response strategies.

The mediating role of perceived trust

Past research has focused on ‘trust’ as a central construct in relationship marketing since its importance was emphasized by Dwyer et al. (1987). Trust is thereby defined as the confidence in the exchange partner’s reliability and integrity (Morgan and Hunt, 1994) or “a willingness to rely on a partner in whom one has confidence” (Moorman et al., 1993, p. 315). Anderson and Mittal (2000) have proposed the Satisfaction-Profit Chain, the most commonly used approach to predict customer behavior in customer-firm relationship contexts. It is a chain of variables influencing each other, starting with service satisfaction, over commitment and trust (often referred to as ‘relationship quality’), onto purchasing/loyalty intentions and finally to behavior and profit. Research in the field of customer-firm relationships is thus fuelled by the belief in the impact of relationship quality on patronage intentions and behavior (Reinartz and Kumar, 2000). Satisfied customers build trust and commitment and in turn develop more positive patronage intentions and then purchase more from the company (Anderson and Mittal, 2000). Trust is therefore considered as one of the most important mediators of the effect of satisfaction on behavior(al intention) (Doney and Cannon, 1997; Morgan and Hunt, 1994; Sichtmann, 2007).

In service recovery literature as well, the regain of trust of duped customers is considered as one of the key underlying mechanisms (DeWitt et al., 2008; Wen and Chi, 2013). Numerous studies confirm that a successful service recovery enhances the perceived trust of complaining customers (e.g., Kau and Loh, 2006; Kimmel, 2010; Tax et al., 1998; Weun et al., 2004). DeWitt et al. (2008) propose a cognitive appraisal model in which trust is one of the key mediators in the relationship between perceived justice and customer loyalty. The complaint recovery process begins with a customer’s cognitive appraisal of the fairness of the resolution of his or her complaint. Subsequently, the outcome of that appraisal determines the degree of trust (DeWitt et al., 2008; Wen and Chi, 2013). Customers’ perceptions of a firm’s trustworthiness, in turn, are positively related to their level of commitment, repurchase intention (DeWitt et al., 2008; Morgan and Hunt, 1994) and PWOM intention (Wen and Chi, 2013).

Trust is also a central construct in online studies. Online reviews provide customers with vicarious access to prior service experiences on which they can base their belief or trust that a firm will deliver quality service (Awad and Ragowsky, 2008; Smith et al., 2005; Sparks and Browning, 2011). For example, Sparks and Browning (2011) found that the valence of a set of
hotel reviews affects the trust in a hotel. Trust, in turn, positively affects online attitudes (Jarvenpaa et al., 2000) and purchase intentions (Awad and Ragowsky, 2008; Comegys et al., 2009; Gefen et al., 2003). Ha (2004), for example, established that trust mediates the effects of positive eWOM on brand commitment. Customers who do not have previous experience with an online vendor rely on the reputation of that vendor to assess his trustworthiness (Beldad et al., 2010). The definition of reputation within the electronic commerce paradigm can be understood in two points (Beldad et al., 2010). First, it is a collective measure of trustworthiness based on referrals or ratings from members in a community (Jøsang et al., 2007). Second, it is an indication of an organization’s credibility, which results from the comparison between what an organization promises and what it actually fulfills (Casaló et al., 2007). In general, trust is affected by perceptions of a company’s ability, integrity, benevolence, and reputation (DeWitt et al., 2008). Online reviews can clearly affect a firm’s reputation, but a managerial response can (positively or negatively) signal credibility, ability, integrity and benevolence. For example, Utz et al. (2009) found that, following a trust violation, an apology results in higher trustworthiness judgments than no response and denial for existing customers.

We argue that trust not only mediates the effects of service recovery efforts on the attitude and behavioral intention of complaining customers, but also on those of review readers as bystanders. If a bystander evaluates a response from an organization to a complaining customer as poor, he or she is likely to perceive the organization as untrustworthy. Conversely, observing a satisfactory service recovery may increase the confidence of a bystander to rely on this provider in the future (Van Vaerenbergh et al., 2013). Kimmel (2010) already argued that a successful recovery for complaining customers can create a feeling of trust among both complaining and observing customers. When a service provider recovers in a way that builds trust with the review reader, the perceived risk in having to complain himself to the providers in the future is likely reduced, which allows review readers to make confident predictions about the providers’ future recovery behaviors. We therefore hypothesize as follows:

**H4**: The interaction effects between review set balance and managerial response hypothesized in H1 through H3 are mediated by perceived trust.

**Method**

**Pretest**

The purpose of the present study is to investigate if and how a service provider should respond to reviews on the Internet to enhance attitude and patronage intention, and to stimulate PWOM from readers. To accomplish this, we set up a study in a restaurant context. The purpose of the pretest was to develop three review sets that would represent the three different balances to be used in the main study (positive, neutral and negative).

A content analysis of existing restaurant evaluation websites revealed three dimensions that are often used for evaluating the quality of a restaurant, namely food, service and atmosphere (Andaleeb and Conway, 2006). Respondents in the pretest (n = 79, 51.9% male, M\text{Age} = 37.35, SD\text{Age} = 11.56) were given online review scores (on a 10 point scale) for three different
hypothetical restaurants. Each restaurant was evaluated by four reviewers on food, service and atmosphere. The review sets were made up so that the scores for each restaurant represented a different balance: the review scores for restaurant A represented a negative balance, for restaurant B a neutral balance and for restaurant C a positive balance (see Table 2). To maintain internal validity, we kept the scores for service and atmosphere constant across the different balance conditions (always scoring 5 or 6 out of 10), altering only the scores for “food” to manipulate the balance. In the negative balance condition (restaurant A), respondents received one positive (9/10) and three negative (2/10) reviews about the food. In the neutral balance condition (restaurant B), two positive (9/10) and two negative (2/10) reviews about the food were provided. In the positive balance condition (restaurant C), respondents saw three positive (9/10) and three negative reviews about the food (2/10). The pretest was within-subjects, each respondent evaluated the three sets of reviews for the three restaurants. After reading the reviews, respondents rated the valence of the review set for each restaurant on a single item 10-point scale (negative – positive). A repeated measures ANOVA showed that the negatively balanced review set was perceived as significantly more negative (M = 4.18) than the neutral (M = 5.18) and the positively (M = 6.47) balanced sets, and that the neutrally balanced set scored significantly more negative than the positively balanced set (F(2, 78) = 97.443, p < .001). In addition, the neutral balance set did not differ significantly from the scale midpoint (5) (t(1, 78) = 1.161, p = .249), while the negative balance set is rated significantly lower (t(1, 78) = -4.420, p < .001) and the positive balance set is rated significantly higher (t(1, 78) = 11.108, p < .001) than the scale midpoint. Hence, the pretest confirmed that the balance manipulation was successful.

<< Insert Table 2 here >>

Main experiment

A 3 (review set balance: negative, neutral, positive) x 6 (managerial response: refutation, no response, apology only, apology plus prospective explanation, apology plus compensation, apology plus prospective explanation plus compensation) between-subjects experiment was conducted to test our hypotheses. We opted to use scenarios as this method is ecologically and internally valid in service encounter research (Wirtz and Mattila, 2004). In addition, scenarios eliminate difficulties associated with observation or enactment of service recovery incidents in real life setting, such as time and financial requirements, managerial undesirability of imposing service failures on customers, and ethical considerations (Bitner, 1990; Van Vaerenbergh et al., 2013).

Respondents were recruited from the panel of a professional marketing research agency. We collected 973 usable responses (50.9% men, age 18-80, average age 42.5 years old, 45.3% higher educated (beyond high school)). They were told that they were planning a casual dinner with friends and that they were responsible for choosing a restaurant and for making a reservation. They were asked to consider the focal restaurant (either restaurant A, B, or C, randomly allocated across conditions), and were provided with the four online review scores for that restaurant as described in the pretest.
After reading these four reviews, respondents immediately read one of the six possible responses by the restaurant’s manager to the entire review set (also randomly allocated), and were asked to rate their perceived trust in the manager’s response (honest, credible, reliable (Soh et al., 2009), \(\alpha = .933\)) on a 7-point Likert scale. In the “no response” condition, respondents immediately completed the dependent measures on the restaurant. Participants were asked to rate their attitude toward the restaurant (My attitude toward this restaurant is positive/negative, I think this restaurant is good/bad, I think this is a high/low quality restaurant (Batra and Stayman, 1990), \(\alpha = .920\)), their patronage intention (It is very likely that I will try out this restaurant, I will definitely go to this restaurant, I will certainly choose this restaurant (Netemeyer et al., 2005), \(\alpha = .963\)) and their PWOM intention (I will recommend the restaurant to people I know, In social situations I will speak favorably about the restaurant, I will bring up the restaurant in a positive way in conversations I have with friends and acquaintances (Arnett et al., 2003), \(\alpha = .971\)) on a 7-point scale. Summated scales of each of the constructs were computed for use in further analyses.

**Results**

The results of a 3x6 MANOVA with attitude, patronage intention and PWOM intention as the dependent variables shows that the multivariate main effects of review set balance (F(6, 1882) = 20.190, \(p < .001\)) and managerial response (F(15, 2598) = 29.553, \(p < .001\)) are statistically significant. More relevant in view of our hypotheses, the interaction effect between review set balance and managerial response is also significant (F(30, 2763) = 6.820, \(p < .001\)). Table 3 presents an overview of the significance, effect sizes and statistical power of the tests (see also Figure 2). In Table 4, we present an overview of the 3x6 experimental conditions with means and standard deviations for the attitude toward the restaurant, patronage intention and PWOM intention. To test the individual hypotheses, we used univariate Scheffé post-hoc tests.

In case of a positive review set balance, there are no significant differences in terms of attitude and patronage intention scores between the different response strategies, supporting H1. However, with respect to PWOM intention, we do find there are significant differences between the response strategies: an apology + prospective explanation (M = 5.46) and an apology + prospective explanation + compensation (M = 5.20) result in significantly higher scores than all other response strategies. Additionally, the “no response” condition (M = 4.16) results in significantly a higher PWOM intention than refutation (M = 2.81), apology only (M = 2.54), and apology + compensation (M = 2.61). As a result, H1 is supported for Att and Pi, but not for PWOM intention.

H2 posited that, in case of a neutral review set balance, at least an apology plus prospective explanation would be necessary. The combination of an apology + prospective explanation results in the most positive attitude (M = 4.23) and patronage intention (M = 4.06) scores, as expected. However, the difference is only significant compared to refutation (\(M_{Att} = 3.57, M_{Pi} = \))
3.20). With respect to PWOM intention, both the apology + prospective explanation (M = 4.67) and the apology + prospective explanation + compensation (M = 4.89) responses are significantly superior to all other responses, which is in line with H2. In addition, in terms of PWOM, refutation (M = 2.40) and apology only (M = 2.61) strategies are significantly worse than no response (M = 3.59).

In case of a negative review set balance, we expected that an apology plus prospective explanation plus compensation would be superior to all other response strategies. This is indeed clearly the case for the three dependent variables under study. The apology + prospective explanation + compensation (M = 4.22) strategy results in a significantly more positive attitude score than refutation (M = 3.53), no response (M = 3.59), and apology only (M = 3.39) strategies. In terms of patronage intention, the apology + prospective explanation + compensation response (M = 3.99) also results in the highest scores, but only significantly different from refutation (M = 3.05) and apology only (M = 3.10). Regarding PWOM intention, apology + prospective explanation + compensation (M = 3.99) results in significantly higher PWOM intention than all other strategies, except for apology + compensation (M = 3.49). These results largely support H3.

In order to test H4, we performed a mediation analysis based on Hayes’ (2013) MEDIATE macro. We ran this in a separate analysis from the first hypotheses, because the mediator (perceived trust in the managerial response) was not measured in the “no response” condition and the MEDIATE macro does not allow to test for interactions. Because of this last fact, we ran three separate models, for the positive, neutral and negative balance review sets individually, using indicator coding for the different managerial response options.

The results of these mediation analyses (Table 5) show that, for the positive balance, the indirect effect of the managerial response on Att, Pi and PWOM intention through perceived trust is not significant, as all bootstrapped 95% confidence intervals contain zero. In H1, we hypothesized that the managerial response would not significantly impact consumer responses with a positive balance review set. This result is confirmed here, even when taking perceived trust into account. None of the managerial responses managed to significantly raise perceived trust over refutation. In the neutral balance, the effect of the managerial response is significantly mediated by perceived trust, confirming H4. In the negative balance, the omnibus indirect effect is not significant, but the results show that apology + prospective explanation + compensation strategy results in a more positive Att, Pi and PWOM intention than all other response strategies, through perceived trust. However, the difference is only significant compared to refutation. Responding through apology + prospective explanation + compensation manages to significantly raise perceived trust compared to refutation and apology only. Therefore, H4 is only partly confirmed with the negative balance.

<< Insert table 5 here >>
Discussion

Service providers are facing more intense customer service pressures than ever before. Today’s customers are not only more demanding, better informed and more assertive when service problems arise, they are also equipped with the Internet to voice their displeasures or dissatisfaction (Hennig-Thurau et al., 2010; Hoffman et al., 1995; Van Vaerenbergh et al., 2012). One of the major challenges for companies is to develop appropriate response strategies to counter negative reviews (Hennig-Thurau et al., 2010). The results of the present study show that the effectiveness of managerial response strategies to negative online reviews is moderated by the balance of the review set (i.e. the ratio of positive and negative reviews). Consistent with equity theory (Adams, 1965), the more negative the balance, the more effort that focuses on customers’ interests is required from the organization to recover the prospective customers.

When the reviews are mostly positive, there is no significant difference in readers’ attitude toward the service provider and patronage intention as a response to the different recovery strategies. However, for PWOM intention, apology plus prospective explanation and apology plus prospective explanation plus compensation strategies are superior compared to all other strategies, including no response. No response, in turn, is still significantly better than refutation, apology only, and apology plus compensation.

When the balance is neutral, suggesting that the opinion of previous customers is divided, an apology combined with a promise that the failure will not happen again appears to be the appropriate thing to do. Offering a compensation in this situation is found to be unnecessary. This is consistent with Sparks and McColl-Kennedy’s (2001) suggestion that in some situations a promise that the problem is solved and that the failure will not happen again, may be sufficient. According to justice theory, perceived justice will be optimal when there is a balance between the input and the output. When the outcome of the recovery is more substantial than the damage experienced, people may feel guilty and less comfortable to accept the compensation (Spreng et al., 1995). As the reviewers’ opinions are divided, the reader may be in doubt of who is accountable, and may perceive the failure as less severe. Consequently, an assurance of a fair service in the future is enough to enhance the attitude, patronage intention and PWOM intention of the reader. The results of the mediation analyses show that this effect is mediated by the perceived trust of review readers in the managerial response.

When the review set balance is negative, readers are more likely to assign accountability to the service provider, as there are more dissatisfied people than satisfied ones. In addition, the perceived probability that the failure will happen again is high. In this case, more effort from the service provider is required. Not only an apology, but also a promise to do better and a compensation are needed to restore the relationship with prospective customers. It is also interesting to note that, when the balance is neutral, apology + prospective explanation, apology + compensation and apology + prospective explanation + compensation strategies are capable of improving attitude and behavioral intention scores to the extent that they are as positive as those for a positive balance. Even when the balance is negative, managers are still capable of enhancing the attitude, patronage intention and PWOM intention to the same level as if the balance were positive, through apology + prospective explanation + compensation. This means that managers
can indeed effectively recover from negative reviews through appropriate response strategies. The results of the mediation analyses further show that an apology + prospective explanation + compensation significantly increase the perceived trust in the managerial response over refutation and apology only, and the beneficial effect of apology + prospective explanation + compensation over refutation is mediated by the perceived trust in the managerial response.

Refutation generally scored poorly. It is the worst option when the review balance is neutral or negative. Only when most reviewers are positive was refutation acceptable in terms of attitude and intention, but also not in terms of PWOM intention. The negative effect of refutation was also found in prior studies where it was shown that refutation does not communicate empathy towards the dissatisfied customers and enhances the credibility of the reviewer (Kerkhof et al., 2010; Utz et al., 2009). However, our study shows that the effect is moderated by review set balance, at least in terms of attitude and patronage intention. This is in line with Kim et al.’s (2004) idea that refutation can be successful as long as “guilt” has not been established (i.e., when the balance of the review set is positive).

It should be noted that apologizing in itself is not sufficient to gain the trust of prospective customers. An apology only did not manage to significantly raise attitudes or patronage intention over no response in any of the balance conditions. Especially in terms of PWOM intention, a simple apology scores poorly, irrespective of balance. This is consistent with prior findings that apology-based service recovery efforts are the least effective in salvaging customer satisfaction (Fang et al., 2013). A number of authors have argued that the positive impact of apologies may be cancelled out by the admission of guilt or taking of responsibility, as it increases the perceived severity of the problem (Kerkhof et al., 2010). To prospective customer, although the organization acknowledges the customer’s complaint, it still fails to take actions for resolving the situation (Davidow, 2003). Especially in terms of PWOM intention, this is not sufficient.

When people are asked to rate their PWOM intention, they seem to be more strict than when they are asked to rate their own attitude and patronage intention. For example, even when most reviewers are positive, review readers still require an apology plus prospective explanation (be it in combination with an additional compensation). Refutation, apology only and apology plus compensation are worse than not replying at all. It seems that the prospective explanation is a crucial element in the response in order to stimulate PWOM. Compared to attitude and patronage intention, PWOM intention involves higher social risks, because if the recommendation is poorly made, people may face social disapproval (Hirschman and Wallendorf, 1982; Sohn, 2009). This may in turn affect the (virtual) credibility and reputation of the recommender (Cheung et al., 2009). People do not want to make a fool of themselves by giving a ‘wrong’ recommendation. When only their own attitude and patronage intention are at stake, they may be more willing to take a chance, as a wrong decision will only have an implication for themselves. A prospective explanation reassures review readers that the problem is solved, and likely not to happen again. Therefore, they can be more confident in recommending the service to others. In addition, Maxham (2001) found that, compared with a good recovery, a very good recovery has a stronger impact on word-of-mouth than on satisfaction or repatronage intention. More research is needed to explain the discrepancy between attitude and patronage intention versus PWOM intention.
PWOM is an important variable. Recent research shows that WOM behavior influences senders’ affective commitment positively (“I have recommended the service provider, so I must like it”). In other words, people who recommend a service provider, will become more loyal to that service provider and are more likely to stay with the same provider (Garnefeld et al., 2011).

The results of the present study show an important divergence from offline service recovery literature. In offline service recovery, compensations have often been shown to positively influence purchases (e.g., Mattila, 2001; Mueller et al., 2003; Wen and Chi, 2013). For example, in a study in the restaurant industry, Mueller et al. (2003) found that compensatory strategies generated higher repeat patronage than non-compensatory strategies (e.g., apology only). In the present context, the proposed compensation is not addressed to the review reader, but to the dissatisfied previous customer. In none of the conditions does compensation significantly increase consumer responses over an apology only. In addition, in the positive balance, the apology + compensation condition results in one of the lowest scores on PWOM intention. When the balance is positive, a compensation may be considered as overkill, which negatively influences reader responses. In terms of PWOM intention, the important thing for readers is the assurance that they will receive a fair service in the future (the prospective explanation). This result is consistent with, for example, Watson (2012), who found that an apology accompanied by a promise to fix the problem scored higher on customer satisfaction than did an apology with compensation. This study reveals that a service provider can choose a costless response strategy (apology + prospective explanation), which has no monetary value, and still satisfy the prospective customers. For the prospective customers, knowing that the problem is solved is crucial to restore their trust in the service provider and can be enough to persuade them buy or use the service. In addition, more effort from the service provider to recover a dissatisfied customer is not necessarily perceived as more positive by prospective customers.

In conclusion, this paper contributes to the literature by (a) examining managerial responses to negative online reviews from the bystander point of view, (b) showing the moderating role of review set balance, and (c) demonstrating the mediating role of perceived trust. We show that managerial response strategies should take the moderating role of review set balance into account because the formation of attitudes and behavioral intentions, especially in the online context, is affected by other people’s opinion. Moreover, based on equity theory, people tend to assign accountability and assess the fairness of a recovery effort depending on the review set balance. Our results show that the more negative the balance, the more effort that focuses on customers’ interests is required from the organization to recover the prospective customers. The findings also contribute to the discussion about whether or not service providers should always respond and/or offer a compensation.

Managerial implications

Our findings confirm that that negative WOM on the Internet can be detrimental for service providers, as a negative balance (more negative than positive reviews) is found to significantly lower attitude and patronage intention of the potential customer, compared to a neutral or positive
balance. Obviously, companies should try to provide an excellent service to satisfy their current customers and encourage these satisfied customers to provide a (positive) evaluation about the service. However, service failures occur. Our study suggests that companies should take the ratio of positive and negative reviews into account in their recovery strategy. The more people write a negative review about the service provider (the more negative the balance is), the more effort the company needs to do to restore attitude and behavioral intention of the prospective customers. In addition, our findings show that when the balance is neutral, or even negative, by applying the appropriate response, companies can still induce the impression as if the balance would have been positive.

When the balance is positive, there is no significant difference between the different response strategies for attitude and patronage intention and, consequently, not responding is likely a good option, as it does not require any effort from the company. For attitude and patronage intention, offering an apology, be it in combination with a promise to do better in the future and/or a compensation does not benefit the organization. Additionally, accepting responsibility may lead to law suits and customers may demand compensation, which may be very costly for the organization (Coombs and Holladay, 2002). When the balance is neutral, apologizing to the dissatisfied customer and promising that the failure will not happen again, is recommended. When the balance is negative, the service provider also needs to offer a compensation next to offering an apology and prospective explanation.

As the results between attitude and patronage intention on the one hand, and PWOM intention on the other hand, are different, marketers should consider which objective they wish to pursue. In terms of attitude and patronage intention, no company response is strictly necessary, as it never leads to a significantly more negative score than the best possible response. However, to stimulate positive word-of-mouth, companies do need to offer an apology plus promise that it will not happen again. An additional compensation is only necessary when the balance is negative. No response is “second best” for the positive and neutral balance (still significantly better than refutation and apology only), but unacceptable for a negative balance.

By responding, either through refutation or through apology only, the service provider may unwillingly emphasize the negative points. When choosing to respond, managers should avoid refutation, as it signals a lack of empathy. Although refutation can be acceptable in terms of attitude and patronage intention when most reviewers are positive, it always harms PWOM intention. Also, offering only an apology is not advisable. Although previous research often finds a positive effect of an apology and therefore recommends this strategy, our findings show that apology only is usually not enough, and needs to be accompanied by a promise that the failure will not happen again. Offering a compensation is often not required, as it does not necessarily benefit the purchase or PWOM intentions of prospective customers. This costless apology + prospective explanation strategy appears to be appreciated by prospective customer. In addition, when the problem is solved, service providers could proactively communicate the improvements they have made, as research has shown that this pays off (Van Vaerenbergh et al., 2012). People consult online reviews because they want to reduce perceived risks in an exchange situation, and a guarantee from the manager that fair service will be provided in the future can reduce that
perceived risks. Assuming that the problem is solved, apology + prospective explanation strategy seems to be the best option across the different balances and is therefore highly recommended. When more reviews are negative, an additional compensation can further boost purchase and PWOM intentions.

**Limitations and suggestions for further research**

Limitations of the present study provide opportunities for future research. First, we use evaluation scores without any text as a review. This method was chosen to ensure the internal validity of the study as it standardizes the service evaluation (e.g., Wirtz and Mattila, 2004). However, this may make it more difficult for the reader to understand the context of the problem and to form a judgment that is only based on the evaluation scores. Further research can include both scores and review text to investigate what the most appropriate response is.

Second, we used four reviews to represent the concept of balance. Due to possible inconsistencies between the actual and the perceived review set balance (Purnawirawan *et al.*, 2012b), it is possible that the results will change with different numbers of reviews (Chevalier and Mayzlin, 2006). On the one hand, due to the large number of available reviews, the reader can get confused and the perception of unequal balance might be strengthened if the tenor of the review is clearly positive or negative, or disappear if the number or positive and negative reviews are more or less equal, or if the valence of the reviews switches between positive and negative. Further research could investigate to what extent the number of reviews affects readers’ perception of justice and how the organization needs to respond.

Third, the current study mainly focuses on outcome failures (failure in the core service, such as bad food). An interesting extension might be to compare outcome and process failures (failure in the way the service was delivered, such as poor service) (Smith *et al.*, 1999). In addition, it is relevant and interesting for future studies to investigate whether different services (e.g. hedonic or utilitarian) require different response strategies. For instance, Mattila (2001) found that customer recovery satisfaction with compensations varied across three types of services. In their study, the positive effect of an apology plus compensation was also less strong for restaurants. Thus, it would be interesting to see if the results of this study are generalizable to other service types.

Furthermore, we drew upon justice theory and attribution of accountability to build hypotheses, while we did not specifically measure the reader’s perceived justice nor attribution of accountability. The injustice did not happen to the reader personally and the recovery effort was not offered to him or her specifically. As a result, the perceived justice of the reader (a third person who plans to purchase the service) may differ from that of the dissatisfied customer. Furthermore, in an online context, both perceived justice and attribution of accountability may be influenced strongly by the judgment of other people (reviewers, discussants). Further research could explore and measure how other people’s opinions affect reader’s perceived justice and attribution of accountability, and measure how feelings of trust, uncertainty and vulnerability can mediate the effects found in this study. It would also be interesting to see how people’s
attributions of the cause of the failures (controllability, stability) will affect the effectiveness of the managerial response.

Finally, although negative reviews in an online context are usually not considered as official complaints, recent studies suggest that senders of negative reviews do not only express their opinion, but also expect companies to respond to their messages (Lee and Song, 2010; Van Noort and Willemsen, 2012). Review sites like TripAdvisor or Yelp even offer companies the opportunity to respond to reviews. This emphasizes the importance of adequately responding to negative WOM. This calls for more research to further understand the complex nature of consumer evaluation processes. How do current customers and readers perceive a standardized response (the same response given the every review)? On the one hand, it shows that the service provider cares. On the other hand, a standardized response might lead customers and readers to think that the service provider is not devoting a lot of effort into responding or recovering the customer. This might challenge the optimal satisfaction-productivity trade-off (Anderson et al., 1997).

Recent research has pointed at the role of perceived privacy infringement (feelings of privacy violation). Some consumers desire a response to their online complaints, while others prefer companies not to intervene (Van Noort and Willemsen, 2012). For instance, Demmers, van Dolen and Weltevreden (2013) found that perceived privacy infringement mediates the impact of proactiveness and personalization level of the response on customer satisfaction. Intervention while not asked for, might trigger even more negative responses of the complaining customers. It remains a challenge for future research to identify which complaints need to be (publicly) addressed and which complaints should be left unanswered.

References


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### Tables & Figures

#### Table 1. Literature overview of responses to service recovery strategies

<table>
<thead>
<tr>
<th>Source</th>
<th>Context</th>
<th>Included strategies</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitner et al. (1990)</td>
<td>700 incidents from customers of airlines, hotels and restaurants</td>
<td>1. Employee response to service delivery system failures 2. Employee response to customer needs and requests 3. Unprompted and unsolicited employee actions</td>
<td>Contact employees are required to respond. The content or form of the response determines customers’ perceived satisfaction.</td>
</tr>
<tr>
<td>Boshoff and Leong (1998)</td>
<td>Experimental study (n = 239). Service failure scenarios in airline and banking</td>
<td>1. Empowerment 2. Attribution (Us, you, a third party) 3. Apology (personal apology, by telephone, by letter)</td>
<td>Once a service failure has occurred, customers expect the service firm to accept responsibility for the problem, they prefer to deal with staff who are fully empowered to solve their problem relatively quickly. An apology in person or, alternatively, by telephone is preferable.</td>
</tr>
<tr>
<td>Study</td>
<td>Methodology</td>
<td>Findings</td>
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<td>---------------------------------------------------</td>
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</table>
2. Quality improvement (prospective explanation)  
3. Compensation  
4. Communications  
Apology-based service recovery efforts are the least effective in salvaging customer satisfaction. Quality improvement is the most effective. Compensation has a moderate and stable impact over time. |
2. Favorable employee behavior  
3. Organizational procedures  
Distributive justice and interactional justice are the most important drivers of post-complaint satisfaction. |
| Goodwin and Ross (1992)                           | Experimental study (n = 285) for four services (auto repair, air travel, dental service, and restaurant) | 1. Apology  
2. Voice  
3. Outcome (Compensation)  
Plus interactions  
An apology on its own is not sufficient to influence consumer perceptions of fairness and satisfaction (may even be negative influence). Only when an apology leads to a positive outcome (compensation) does apology play a significant role. |
| Johnston and Mehra (2002)                         | Case studies (management interviews) on complaint handling with 5 leading service companies in UK (NA) | Identify twelve insights into best complaint management practice, amongst which: timely response, human touch, need for closure. |
| Kerkhof *et al.* (2010)                           | Experimental study (n = 124) on response strategies to a negative review for an online digital camera | 1. No response  
2. Refutation  
3. Apology  
Refutation leads to lower corporate credibility, apology had no effect. Both apologizing and refutation (as opposed to no response) made participants rate the complaint in the review as more severe. |
| Kim *et al.* (2004)                               | Experimental study (n = 200) on trust violation in hiring | 1. Denial (Refutation)  
2. Apology  
As long as guilt has not been established, a refutation can be more successful in rebuilding trust than an apology. Trusting beliefs mediate the effects of violation response on hiring intentions. |
2. Replacement  
3. Apology  
4. Free food, drinks  
5. Correction  
6. Replacement plus free food, drinks  
7. Coupon  
8. Managerial intervention  
9. Discount  
Apology can calm angry customers and is even considered the most desired and expected organizational response by customers. 88.5% of those indicating a good recovery would dine again at the property. |
<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Conditions</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mattila (2001)</td>
<td>Experimental study (n = 441) for 3 services</td>
<td>Restaurant, hair stylist, dry cleaning</td>
<td>An apology plus compensation positively affects recovery satisfaction and loyalty for a hair stylist, but not as much for a restaurant or dry cleaning. The severity of the failure influences the appropriate response strategy.</td>
</tr>
<tr>
<td>Mueller et al. (2003)</td>
<td>Personal interviews (n = 719)</td>
<td>with restaurant customers in Ireland and the US</td>
<td>The highest repeat patronage rates are generated by compensatory strategies; apologies are also likely to generate repeat patronage. Overcompensation methods do not influence customer repeat patronage intentions or ratings of the recovery effort.</td>
</tr>
<tr>
<td>Smith and Bolton (1998)</td>
<td>Quasi-experiments</td>
<td>about hypothetical service failures with actual customers for restaurants</td>
<td>Excellent service recoveries can lead to increased customer satisfaction and repurchase intention. This result was only obtained at customers’ very highest recovery ratings.</td>
</tr>
<tr>
<td>Smith et al. (1999)</td>
<td>Mixed-design experiment</td>
<td>about hypothetical service failures with actual customers for restaurants</td>
<td>Customers prefer to receive recovery resources that “match” the type of failure they experience in &quot;amounts&quot; that are commensurate with the magnitude of the failure that occurs. Compensation strongly affects distributive justice, apology positively affects interactional justice.</td>
</tr>
<tr>
<td>Utz et al. (2009)</td>
<td>Experimental study (n = 1141)</td>
<td>on trust violations on eBay</td>
<td>Sellers who deny responsibility are rated as significantly less trustworthy compared to those who do not respond. Plain apologies are more successful than denials and not responding in repairing trust. This effect is mediated by the perceived believability of the comments.</td>
</tr>
<tr>
<td>Van Noort and Willemsen (2012)</td>
<td>Experimental study (n = 163)</td>
<td>on car recall</td>
<td>Consumers increasingly expect organizations to respond to negative word-of-mouth. Negative brand evaluations engendered by NWOM can be attenuated by webcare interventions dependent on type of strategy (proactive vs. reactive) and platform used (consumer-generated vs. brand-generated blog). This effect is mediated by conversational human voice.</td>
</tr>
<tr>
<td>Watson (2012)</td>
<td>Experimental study (n = 110)</td>
<td>for two types of services</td>
<td>Customer satisfaction and loyalty are lower for service recoveries that offer compensation only versus service.</td>
</tr>
<tr>
<td>(hairstyling and online gift purchase)</td>
<td>compensation</td>
<td>recoveries that offer either assistance only or assistance with compensation. No difference between assistance only and assistance plus compensation on loyalty.</td>
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| Wen and Chi (2013)                   | Structural equation model based on service recovery with delayed airline passengers (n = 581) | 1. Interactional justice  
2. Procedural justice  
3. Distributive justice  
Interactional justice, procedural justice, and distributive justice have positive influence on purchase intention and PWOM intention, through satisfaction with service recovery and trust. Besides a sincere apology, companies also need to have a fair compensation policy in place to appease dissatisfied customers. |
| Wirtz and Mattila (2004)             | 1. Apology  
2. Compensation  
3. Recovery speed | Compensation may not enhance satisfaction when the recovery process is either extremely well-executed (an immediate response combined with an apology) or with a poor recovery process (a delayed response without apology). Compensation enhances satisfaction in mixed-bag recovery situations (delayed recovery with an apology, or immediate recovery without apology). |
## Table 2: Overview of the three review balance sets

<table>
<thead>
<tr>
<th></th>
<th>(Restaurant A)</th>
<th>(Restaurant B)</th>
<th>(Restaurant C)</th>
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<tbody>
<tr>
<td></td>
<td>Negative balance</td>
<td>Neutral balance</td>
<td>Positive balance</td>
</tr>
<tr>
<td>Review 1</td>
<td>Food: 9</td>
<td>Food: 9</td>
<td>Food: 9</td>
</tr>
<tr>
<td>Review 2</td>
<td>Food: 2</td>
<td>Food: 2</td>
<td>Food: 2</td>
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<tr>
<td></td>
<td>Atmosphere: 5</td>
<td>Atmosphere: 5</td>
<td>Atmosphere: 5</td>
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<tr>
<td>Review 3</td>
<td>Food: 2</td>
<td>Food: 9</td>
<td>Food: 9</td>
</tr>
<tr>
<td></td>
<td>Service: 5</td>
<td>Service: 5</td>
<td>Service: 5</td>
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<tr>
<td>Review 4</td>
<td>Food: 2</td>
<td>Food: 2</td>
<td>Food: 9</td>
</tr>
<tr>
<td></td>
<td>Service: 5</td>
<td>Service: 5</td>
<td>Service: 5</td>
</tr>
<tr>
<td></td>
<td>Atmosphere: 5</td>
<td>Atmosphere: 5</td>
<td>Atmosphere: 5</td>
</tr>
<tr>
<td></td>
<td>M = 4.18</td>
<td>M = 5.18</td>
<td>M = 6.47</td>
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<td></td>
<td>F(2, 78) = 97.443, p &lt; .001</td>
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Table 3: Effect sizes and power

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
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<tr>
<td>Balance</td>
<td>Att</td>
<td>27.891</td>
<td>&lt; .001</td>
<td>.056</td>
<td>55.783</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Int</td>
<td>22.832</td>
<td>&lt; .001</td>
<td>.046</td>
<td>45.664</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>PWOM</td>
<td>48.805</td>
<td>&lt; .001</td>
<td>.094</td>
<td>97.611</td>
<td>1.000</td>
</tr>
<tr>
<td>Managerial</td>
<td>Att</td>
<td>4.606</td>
<td>&lt; .001</td>
<td>.024</td>
<td>23.028</td>
<td>.975</td>
</tr>
<tr>
<td>response</td>
<td>Int</td>
<td>4.261</td>
<td>.001</td>
<td>.022</td>
<td>21.303</td>
<td>.963</td>
</tr>
<tr>
<td></td>
<td>PWOM</td>
<td>92.393</td>
<td>&lt; .001</td>
<td>.329</td>
<td>461.967</td>
<td>1.000</td>
</tr>
<tr>
<td>Balance x</td>
<td>Att</td>
<td>1.835</td>
<td>.051</td>
<td>.019</td>
<td>18.355</td>
<td>.852</td>
</tr>
<tr>
<td>Managerial</td>
<td>Int</td>
<td>1.616</td>
<td>.097</td>
<td>.017</td>
<td>16.160</td>
<td>.793</td>
</tr>
<tr>
<td>response</td>
<td>PWOM</td>
<td>13.683</td>
<td>&lt; .001</td>
<td>.127</td>
<td>136.831</td>
<td>1.000</td>
</tr>
</tbody>
</table>
### Table 4: The balance-response interaction on Attitude, Patronage intention and Positive WOM intention (Scheffé tests)

<table>
<thead>
<tr>
<th>Balance</th>
<th>Refutation</th>
<th>No response</th>
<th>Apology only</th>
<th>Apology + prospective explanation</th>
<th>Apology + compensation</th>
<th>Apology + prospective explanation + compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>n 58</td>
<td>58</td>
<td>48</td>
<td>54</td>
<td>59</td>
<td>51</td>
</tr>
<tr>
<td>Att</td>
<td>4.30 (.88)</td>
<td>4.22 (.90)</td>
<td>4.31 (1.01)</td>
<td>4.32 (.97)</td>
<td>4.48 (.84)</td>
<td>4.40 (1.05)</td>
</tr>
<tr>
<td>Pi</td>
<td>4.01 (1.06)</td>
<td>3.97 (1.12)</td>
<td>3.96 (1.21)</td>
<td>3.99 (1.05)</td>
<td>4.09 (1.10)</td>
<td>4.26 (1.18)</td>
</tr>
<tr>
<td>PWOM</td>
<td>2.81 (1.09)</td>
<td>4.16 (1.14)</td>
<td>2.54 (1.37)</td>
<td>5.46 (1.15)</td>
<td>2.61 (1.21)</td>
<td>5.20 (1.28)</td>
</tr>
<tr>
<td>Neutral</td>
<td>n 51</td>
<td>51</td>
<td>51</td>
<td>55</td>
<td>47</td>
<td>57</td>
</tr>
<tr>
<td>Att</td>
<td>3.57 (.83)</td>
<td>3.65 (1.03)</td>
<td>4.13 (1.05)</td>
<td>4.23 (1.04)</td>
<td>4.02 (1.10)</td>
<td>4.07 (1.09)</td>
</tr>
<tr>
<td>Pi</td>
<td>3.20 (1.14)</td>
<td>3.44 (1.23)</td>
<td>3.72 (1.33)</td>
<td>4.06 (1.25)</td>
<td>3.86 (1.36)</td>
<td>3.71 (1.33)</td>
</tr>
<tr>
<td>PWOM</td>
<td>2.40 (1.16)</td>
<td>3.59 (1.18)</td>
<td>2.61 (1.07)</td>
<td>4.67 (1.22)</td>
<td>3.95 (1.23)</td>
<td>4.89 (1.27)</td>
</tr>
<tr>
<td>Negative</td>
<td>n 49</td>
<td>60</td>
<td>57</td>
<td>51</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td>Att</td>
<td>3.53 (1.12)</td>
<td>3.59 (1.08)</td>
<td>3.39 (1.31)</td>
<td>3.84 (.99)</td>
<td>3.81 (1.35)</td>
<td>4.22 (.83)</td>
</tr>
<tr>
<td>Pi</td>
<td>3.05 (1.05)</td>
<td>3.32 (1.45)</td>
<td>3.10 (1.42)</td>
<td>3.40 (1.24)</td>
<td>3.41 (1.53)</td>
<td>3.99 (1.11)</td>
</tr>
<tr>
<td>PWOM</td>
<td>2.18 (1.17)</td>
<td>2.32 (1.23)</td>
<td>2.47 (1.37)</td>
<td>3.14 (1.14)</td>
<td>3.49 (1.17)</td>
<td>3.99 (1.31)</td>
</tr>
</tbody>
</table>

*superscript x signifies, within the same review set balance, a statistically significant difference (p < .05) with column x*
Table 5: Indirect effects through perceived trust and 95% confidence intervals per balance

<table>
<thead>
<tr>
<th></th>
<th>Att Effect</th>
<th>CI</th>
<th>Pi Effect</th>
<th>CI</th>
<th>PWOM Effect</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive balance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refutation</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
</tr>
<tr>
<td>Apology only</td>
<td>-.027</td>
<td>[-.226; .169]</td>
<td>-.027</td>
<td>[-.236; .164]</td>
<td>-.013</td>
<td>[-.124; .078]</td>
</tr>
<tr>
<td>Apology + prospective explanation</td>
<td>-.092</td>
<td>[-.293; .086]</td>
<td>-.093</td>
<td>[-.300; .082]</td>
<td>-.046</td>
<td>[-.158; .038]</td>
</tr>
<tr>
<td>Apology + compensation</td>
<td>.136</td>
<td>[-.061; .328]</td>
<td>.139</td>
<td>[-.065; .329]</td>
<td>.062</td>
<td>[-.030; .181]</td>
</tr>
<tr>
<td>Apology + prospective explanation + compensation</td>
<td>-.006</td>
<td>[-.225; .191]</td>
<td>-.006</td>
<td>[-.234; .192]</td>
<td>&lt; .001</td>
<td>[-.118; .101]</td>
</tr>
<tr>
<td>Omnibus effect</td>
<td>.001</td>
<td>[-.008; .012]</td>
<td>.001</td>
<td>[-.008; .012]</td>
<td>&lt; .001</td>
<td>[-.007; .005]</td>
</tr>
<tr>
<td><strong>Neutral balance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refutation</td>
<td>-.589</td>
<td>[-.908; -.318]</td>
<td>-.664</td>
<td>[-1.015; -.373]</td>
<td>-.333</td>
<td>[-.570; -.161]</td>
</tr>
<tr>
<td>Apology only</td>
<td>-.231</td>
<td>[-.523; .016]</td>
<td>-.261</td>
<td>[-.586; .028]</td>
<td>-.131</td>
<td>[-.318; .006]</td>
</tr>
<tr>
<td>Apology + prospective explanation</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
</tr>
<tr>
<td>Apology + compensation</td>
<td>-.211</td>
<td>[-.462; -.015]</td>
<td>-.238</td>
<td>[-.507; .019]</td>
<td>-.120</td>
<td>[-.286; .004]</td>
</tr>
<tr>
<td>Apology + prospective explanation + compensation</td>
<td>-.062</td>
<td>[-.297; .179]</td>
<td>-.070</td>
<td>[-.328; .201]</td>
<td>-.035</td>
<td>[-.181; .096]</td>
</tr>
<tr>
<td>Omnibus effect</td>
<td>.045</td>
<td>[.009; .085]</td>
<td>.051</td>
<td>[.012; .096]</td>
<td>.026</td>
<td>[.006; .052]</td>
</tr>
<tr>
<td><strong>Negative balance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refutation</td>
<td>-.356</td>
<td>[-.606; -.162]</td>
<td>-.335</td>
<td>[-.573; -.152]</td>
<td>-.317</td>
<td>[-.534; -.145]</td>
</tr>
<tr>
<td>Apology only</td>
<td>-.182</td>
<td>[-.411; .017]</td>
<td>-.171</td>
<td>[-.409; .006]</td>
<td>-.165</td>
<td>[-.364; .014]</td>
</tr>
<tr>
<td>Apology + prospective explanation</td>
<td>-.105</td>
<td>[-.319; .074]</td>
<td>-.099</td>
<td>[-.290; .082]</td>
<td>-.099</td>
<td>[-.285; .079]</td>
</tr>
<tr>
<td>Apology + compensation</td>
<td>-.061</td>
<td>[-.229; .096]</td>
<td>-.058</td>
<td>[-.220; .093]</td>
<td>-.054</td>
<td>[-.196; .093]</td>
</tr>
<tr>
<td>Apology + prospective explanation + compensation</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
<td>(base)</td>
</tr>
<tr>
<td>Omnibus effect</td>
<td>.016</td>
<td>[-.002; .037]</td>
<td>.015</td>
<td>[-.001; .035]</td>
<td>.014</td>
<td>[-.001; .033]</td>
</tr>
</tbody>
</table>
Figure 1: Typologies of response strategies

Q1: Acknowledging the problem?
   Yes

Q2: Taking responsibility?
   Yes

Q3: Providing closure/solution?
   Yes

Apology + prospective explanation
Apology + compensation
Apology + prospective explanation + compensation

Low effort

No response
Greenberg 1990; Michel, Bowen, and Johnston 2009; Kerkhof, Utz, and Beukeboom 2010

Refutation
Benoit 1995; Coombs 1998; Kim et al. 2004; Kerkhof, Utz, and Beukeboom 2010;

Apology
Benoit 1995; Johnston and Mehra 2002; Davdow 2003; Fang, Luo, and Jiang 2013

High effort
Figure 2: The impact of balance-response interaction on Patronage Intention and WOM intention
## APPENDIX

Table A: Formulations of the different responses to counter negative reviews

<table>
<thead>
<tr>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No response</strong></td>
</tr>
<tr>
<td>Dear customer,</td>
</tr>
<tr>
<td>We regret that some people were unhappy with the food at our restaurant. Of course, people may have different taste and preferences. We guarantee our customers that our chef cook has excellent qualifications and that meals have always been delicious and well served. We rarely get complaints about this.</td>
</tr>
<tr>
<td>Sincerely yours,</td>
</tr>
<tr>
<td>Restaurant X</td>
</tr>
<tr>
<td><strong>Refutation</strong></td>
</tr>
<tr>
<td>Dear customer,</td>
</tr>
<tr>
<td>We regret that some people were unhappy with the food at our restaurant. We guarantee our customers that our chef cook has excellent qualifications and that meals have always been delicious and well served. We rarely get complaints about this.</td>
</tr>
<tr>
<td>Sincerely yours,</td>
</tr>
<tr>
<td>Restaurant X</td>
</tr>
<tr>
<td><strong>Apology (only)</strong></td>
</tr>
<tr>
<td>Dear customer,</td>
</tr>
<tr>
<td>We regret that some people were unhappy with the food at our restaurant. We sincerely apologize for any inconvenience you experienced during your visit. We are committed to provide a good service and to serve delicious meals. For this reason, we were having major reforms in the kitchen, accompanied by the necessary staff changes. This seems to have caused some problems. Once again our apologies, and we hope to see you again and be at your service soon.</td>
</tr>
<tr>
<td>Sincerely yours,</td>
</tr>
<tr>
<td>Restaurant X</td>
</tr>
<tr>
<td><strong>Apology plus prospective explanation</strong></td>
</tr>
<tr>
<td>Dear customer,</td>
</tr>
<tr>
<td>We regret that some people were unhappy with the food at our restaurant. We sincerely apologize for any inconvenience you experienced during your visit. We are committed to provide a good service and to serve delicious meals. For this reason, we were having major reforms in the kitchen, accompanied by the necessary staff changes. This has temporarily caused some problems, but now we have a new chef cook with excellent qualifications, and we can operate in an optimal way again.</td>
</tr>
<tr>
<td>Sincerely yours,</td>
</tr>
<tr>
<td>Restaurant X</td>
</tr>
<tr>
<td><strong>Apology plus compensation</strong></td>
</tr>
<tr>
<td>Dear customer,</td>
</tr>
<tr>
<td>We regret that some people were unhappy with the food at our restaurant. We sincerely apologize for any inconvenience you experienced during your visit. We are committed to provide a good service and to serve delicious meals. For this reason, we were having major reforms in the kitchen, accompanied by the necessary staff changes. This seems to have caused some problems. Once again our apologies, and we hope to see you again and be at your service soon.</td>
</tr>
<tr>
<td>Sincerely yours,</td>
</tr>
<tr>
<td>Restaurant X</td>
</tr>
<tr>
<td>Apology plus prospective explanation plus compensation</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Dear customers,**  
| We regret that some people were unhappy with the food at our restaurant. We sincerely apologize for any inconvenience you experienced during your visit. We are committed to provide a good service and to serve delicious meals. For this reason, we were having major reforms in the kitchen, accompanied by the necessary staff changes. This has temporarily caused some problems, but now we have a new chef cook with excellent qualifications, and we can operate in an optimal way again. To make it good to our dissatisfied customers, we would like to offer you a free aperitif of your choice on your next visit, with no further purchase obligation.  
| Sincerely yours,  
| Restaurant X |