



# How can firms stop customer revenge? The effects of direct and indirect revenge on post-complaint responses

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## Abstract

Do customers feel better or worse after enacting revenge? Using a multimethod approach, we show that customers' post-complaint desire for revenge depends on whether they initially use *direct* or *indirect* revenge behaviors (RBs). Specifically, the current research makes three contributions. First, we find that the more customers use direct RBs, the more pronounced is the decrease in their post desire for revenge over time, whereas a strong engagement in indirect RBs is associated with higher post desire for revenge over time. A series of experiments also indicate that direct RBs lead to less post desire for revenge and more positive affect, compared to the indirect RBs condition. Second, we document the process underlying each effect. The beneficial effect of direct RBs is explained by *justice restoration*, while the deleterious effect of indirect RBs is mainly explained by *public exposure*. Third, on the basis of our findings, we test different managerial tactics to reduce avengers' post desire for revenge. For *direct avengers*, recoveries with full or overcompensation substantially reduce their negative responses because these customers are primarily driven by justice restoration. For *indirect avengers*, our prescription involves taking initiatives to change their focus from public exposure to justice restoration by using proactive social media tools. This switch makes these latter customers more amenable to most recoveries, even poor ones.

**Keywords** Customer revenge · Public exposure · Justice theory · Negative affect · Brand transgression · Service failure · Service recovery · Post-complaint responses

The proliferation of online platforms has greatly empowered customers in their ability to get revenge against firms (Ward

and Ostrom 2006; Kähr et al. 2016). According to an industry survey (Grant 2013), 85% of customers get revenge against firms after receiving poor service. Customer revenge behavior (RB) is defined as any customer's action that aims to punish a firm for the damage it has caused (Bechwati and Morrin 2003). Grounded in the complaining literature (Huefner and Hunt 2000), RBs can be viewed as a specific type of complaining behavior that aims at punishing a firm rather than seeking reparation (Grégoire and Fisher 2008). Because such behaviors can be very costly for firms, the phenomenon of customer revenge has been gaining in popularity (e.g., Bechwati and Morrin 2003; McColl-Kennedy et al. 2009; Ward and Ostrom 2006). For example, a viral video showing the removal of a doctor from a United Airlines flight has cost about \$1.4 billion in stock value to this airline (Shen 2017).

The current literature emphasizes the antecedents—such as the justice dimensions, control, and blame (Bechwati and Morrin 2003, 2007)—and the mechanism involving anger and rage (McColl-Kennedy et al. 2009) to explain the occurrence of customer revenge. This literature focuses on the psychological process leading to revenge, which has been conceptualized as the final dependent variable. In short, the

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current literature has focused on the chain of effects that *ends* with RBs (Surachartkumtonkun et al. 2013), and the prevention of such behaviors.

The current research focuses instead on RBs as *starting points* and studies their *subsequent* effects on post-complaint cognitions, affects, and residual desire for revenge (i.e., the chain of effects that *follows* RBs). Specifically, we answer the following questions: How do customers feel after enacting revenge? Better or worse? Here, managers need to know whether customers' initial actions against the firm satiate or amplify their desire to keep punishing the firm (hereafter, *post desire for revenge*). In contrast to prior work that focuses on preventing RB, we propose recovery tactics for customers who have already engaged in RB.

The examination of this issue is not straightforward because of the existence of two rival explanations about the effects of RBs. On the one hand, the popular adage “revenge is sweet” suggests that engaging in revenge could be satisfying and cathartic (e.g., Gollwitzer et al. 2011; Gollwitzer and Denzler 2009; Komarova et al. 2018). On the other hand, confirming Walter Weckler's statement, “revenge has no more quenching effect on emotions than salt water has on thirst,” several studies find that revenge makes people feel more negatively about the incident (Carlsmith et al. 2008; Yoshimura 2007; López-López et al. 2014). Building on these results, the current research focuses on three contributions: (1) reconciling both rival explanations, (2) documenting the processes underlying each effect, and (3) testing managerial actions to reduce post desire for revenge.

As our first contribution, we argue that a customer's post desire for revenge depends on the type of RB—*direct* or *indirect*—that is initially taken against the firm (Buss 1961; Grégoire et al. 2010). This distinction refers to the extent to which the firm is made aware of a RB, and whether managers can identify the customer who initiated the RB. While direct RBs call on the firm personally, indirect RBs are meant to hurt the firm in a stealthier manner. For example, insulting a front-line employee represents direct RBs, whereas complaining online on [bbb.org](http://bbb.org) is a form of indirect RB. Based on this distinction, our first contribution is to show that initial indirect RBs tend to fuel post desire for revenge (i.e., a “salt water” effect), whereas initial direct RBs alleviate this same response (i.e., a “revenge is sweet” effect).

Our second contribution is to unveil the processes underlying the differential effects of direct versus indirect RBs so that managers can better act on these mechanisms. These two effects can be mainly attributed to different processes—that is, *justice restoration* for direct RB and *public exposure* for indirect RB. On the one hand, we argue that justice restoration is a key process explaining the quenching effect of direct RBs. Direct behaviors have a greater restorative ability because customers can see the consequences of their actions on firms (Gollwitzer and Denzler 2009; Lin et al. 2013). On the other

hand, we posit that public exposure (Ward and Ostrom 2006) is the most important process explaining the amplification effect of indirect RBs on post desire for revenge. When customers publicly alert other customers about their misadventure, they engage in a form of crusade, which amplifies their post desire for revenge.

Our third contribution is to test recoveries to help managers deal more effectively with direct versus indirect RBs. Compensation, which encompasses both a material reimbursement (cash) and a psychological redress (apology) (Davidow 2003), has been found to be the most effective recovery for consumers (Gelbrich and Roschk 2011). By manipulating different combinations of reimbursement and apology, we examine the effect of different levels of recoveries after revenge. For *direct avengers*, recoveries based on full reimbursement and apology substantially reduce their negative responses because these individuals are primarily driven by a sense of justice restoration. However, there is a noteworthy flipside for these customers; they would respond especially negatively to poor recoveries. For *indirect avengers*, our prescription involves taking measures to change their focus from “public exposure” to “justice restoration.” We argue that managers can “turn” these customers around by using online tools to *proactively* contact these individuals (Challagalla et al. 2009). Through these measures, managers can transform indirect avengers and make them more amenable to justice restoration. We find that these “newly transformed” indirect avengers (compared to the direct avengers) respond as positively to superior recoveries, and even more positively to poor recoveries.

We present next a literature review and provide an overview of our comprehensive model. We then present our hypotheses and our multimethod approach (Hamilton 2016), combining a field study and a series of experiments.

## Research background

This section presents: (1) the distinction between RBs and complaining behaviors, (2) the antecedents leading to RBs, (3) the distinction between pre versus post desire for revenge, and (4) the two rival explanations about the effect of RBs.

### Distinctions and similarities between revenge behaviors and complaining behaviors

The literature on complaining behaviors is at the origin of customer revenge (Huefner and Hunt 2000), and these two literatures are intimately related. The concept of complaining behaviors was first discussed in the 1970s. Broadly speaking, complaining behaviors are defined as any consumer actions that convey an expression of dissatisfaction after a failure (Landon 1980). Singh (1988) proposed a typology of these

behaviors in three groups: (1) voice response (i.e., actions seeking to contact the firm), (2) private response (i.e., word-of-mouth with friends), and (3) third-party response (i.e., actions directed at third party organizations, such as newspapers). Apart from negative word-of-mouth, this literature does not make explicit whether complainers voiced their concerns for positive motives (e.g., problem-solving) or negative motives (e.g., revenge) (Huefner and Hunt 2000).

The literature on customer revenge was developed in the early 2000s (e.g., Bechwati and Morrin 2003). This literature was first inspired by the notion of organizational revenge (Aquino et al. 2001), but now this stream stands on its own with dozens of articles studying customer revenge. For initial work in marketing, see Huefner and Hunt (2000), Bechwati and Morrin (2003), Ward and Ostrom (2006), and McColl-Kennedy et al. (2009).

The linkage between revenge behaviors and complaining behaviors has been discussed by Grégoire and Fisher (2008), who explain that the generic conceptualization of consumer complaint does not account for different ways to restore justice (reparation vs. revenge). For example, a customer could contact a third party to request additional help to find a reasonable settlement versus to punish the firm publicly. In sum, these authors suggest adding another layer of conceptualization to the generic complaining behaviors, which allows distinguishing behaviors that are motivated by reparation versus revenge. The current research focuses on “revenge” complaining behaviors, given the costs associated with such responses.

### Antecedents leading to customer revenge

A recent literature review (Joireman et al. 2016) identifies four situations in which customers are likely to see revenge as an appropriate response: (1) an act of betrayal, (2) a severe service failure, (3) a situation triggering an inference of greediness, and (4) a double deviation (a service failure followed by a failed recovery). Customers typically consider revenge after a service failure characterized by extreme cognitions (i.e., betrayal, high severity or greed), or when their request for recoveries kept failing (i.e., a double deviation). Revenge is rarely the first considered response; customers engage in RBs in specific situations when they feel that the firm deserves to be punished in order to restore a form of social order (Komarova et al. 2018; Lin et al. 2013).

As noted, a double deviation is not the only situation triggering customer revenge. However, this context has been regularly used for two key reasons. First, after an initial service failure, customers can privately complain to a firm so that they could obtain a “just” recovery (Smith et al. 1999). When the initial recovery efforts fails, customers feel a heightened lack of justice, which prompts them to consider revenge as a form of “last recourse” to restore justice (Walster et al. 1973). Here,

a violation of the justice norm at the recovery stage—based on the distributive, interactional and procedural dimensions (Tax et al. 1998)—leads customers to strongly engage in RBs (Bechwati and Morrin 2003). Second, a double deviation is also a “practical” context to study revenge because it is relatively easy to manipulate in a realistic manner (Bechwati and Morrin 2003). Building on this tradition, all our studies involve a double deviation. That being said, our logic should apply to all situations generating customer revenge.

### Pre versus post desire for revenge

Many authors (Bechwati and Morrin 2003; Grégoire et al. 2010) make a distinction between a desire for revenge and RBs. Consistent with our initial definition of RB, a *desire for revenge* is defined as the felt urge to punish and get even with a firm for what it has done. This distinction is important because customers do not always have the ability, power, or resources to materialize their desires into real behaviors.

While prior work has focused mainly on the antecedents leading to RBs, we extend this stream by examining how customers respond and feel *after enacting revenge*. To do so, we make a key distinction between *pre* versus *post* desire for revenge. The current literature examines how some antecedents (e.g., betrayal, severity, etc.) lead customers to develop an initial or pre desire for revenge, which drives them to engage in RBs. This stream is based on the sequence “antecedents → pre desire for revenge → RBs” (Bechwati and Morrin 2003; Joireman et al. 2016). We then take the extra step by examining how these RBs fulfill the initial need for revenge and result in post desire for revenge—that is, the remaining or residual desire that customers continue to experience after they have taken actions (Komarova et al. 2018). In other words, this research is interested in the linkage “RBs → post desire for revenge.” To better understand this sequence, we review two rival explanations advanced in the literatures.

### Two rival explanations

**Revenge is sweet** While enacting revenge, those who believe in the beneficial effects of cathartic actions are more likely to vent their negative emotions to improve their mood (Bushman et al. 2001). They engage in RBs hoping to discharge their negative feelings and to feel a sense of relief (Ortony et al. 1990). They believe negative emotions “build up” if they do not express them, which could cause psychological imbalance (Bohart 1980). Using the metaphor of a “hydraulic model,” the catharsis effect assumes that keeping negative emotions inside would make them “burst out” in an aggressive manner. Consistent with this view, De Quervain et al. (2004) find that punishing a norm violator activates reward-processing areas in the brain. These punishing actions trigger the dorsal striatum, which is linked to the reward-processing areas that are

activated when a goal is achieved (Knutson 2004). In the service literature, Komarova et al. (2018) find that customers experience a lesser post desire for revenge once they have punished a firm, found guilty of an immoral action.

**Revenge has the same effect as salt water on thirst** There is evidence that contradicts the previous findings. Carlsmith et al. (2008) claim that although people punish offenders hoping it will improve their mood, these actions have the opposite effect. According to their findings, people miscalculate the effect of revenge on their future emotions. After taking revenge, they end up feeling worse because they keep thinking about the event, instead of “letting go.” It is also important to note that thinking continuously about firms’ failures primes aggressive thoughts, sustains angry feelings (Bushman 2002; Collins and Bell 1997) and reduces people’s ability to forgive (McCullough et al. 2007). In the service literature, López-López et al. (2014) find that when customers share a negative episode with others, they feel more negatively about the incident. These findings suggest that engaging in RBs may feed one’s desire for revenge.

### A conceptual framework to reconcile the two rival explanations

We test a comprehensive framework to reconcile these two rival explanations. As illustrated in Fig. 1, we argue that the way customers enact revenge—directly or indirectly—leads to different perceptions of justice restoration and/or public exposure, which in turn determine (in different ways) their post desire for revenge. This section provides an overview

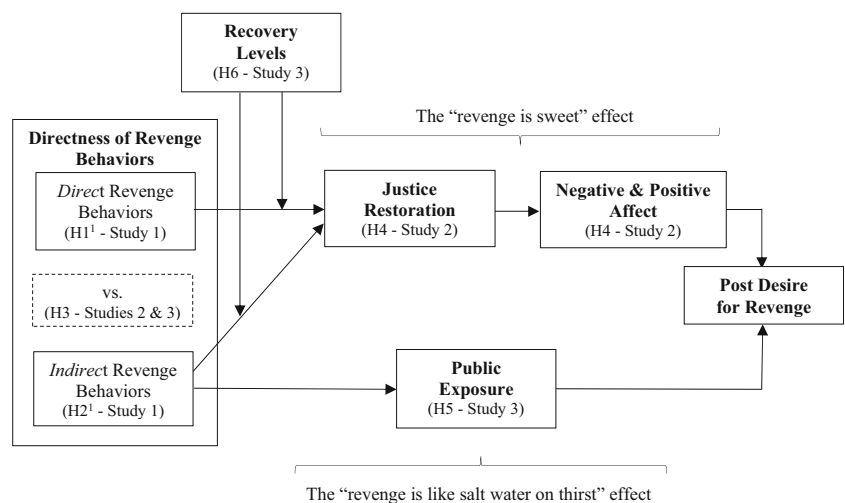
of our framework; our detailed hypotheses are presented during the course of our studies.

This framework relies on a key distinction between direct versus indirect RBs (Baron and Neuman 1996; Buss 1961). Direct RBs are retaliatory actions that occur within the borders of a firm; managers are fully aware of these avengers. For instance, a customer may seek revenge by confronting or giving more work to employees. In contrast, indirect RBs are retaliatory actions that happen beyond the borders of a firm, and employees are not immediately aware of such actions. All forms of negative word-of-mouth belong to this category.

On the one hand, we argue that direct RBs create a “revenge is sweet” effect through their effects on a global measure of justice restoration (e.g., Ambrose and Schminke 2009; DeWitt et al. 2008), defined as the extent to which customers perceive that the imbalance with the firm has been corrected (after that they took actions). To perceive such justice restoration, customers need to know that the firm understands why and by whom it got punished (Gollwitzer and Denzler 2009). Direct RBs are best designed to serve such functions because they occur within the borders of a firm. Once justice is restored, customers feel less negative, which in turn decreases their post desire for revenge (see H1, H3-H4 in Fig. 1).

On the other hand, we posit that indirect RBs create a “salt water” effect, mainly through their effects on public exposure—defined as the extent to which customers perceive that they have openly exposed a firm’s misbehaviors (Ward and Ostrom 2006). When customers get revenge indirectly, they contribute to alerting others so that these individuals would not experience a similar incident. By doing so, the complainers engage in a form of public crusade, and they keep reflecting about these events (Carlsmith et al. 2008), which

Fig. 1 An overview of our comprehensive framework



<sup>1</sup>Note: H1 and H2 are not perfectly represented by this Figure. In fact H1 and H2 test the effects of direct and indirect RB on the evolution of post desire for revenge over time. H1 and H2 do not involve any test of mediation.

results in an amplification of their desire for revenge (H2-H3 and H5).

Through the understanding of these two mechanisms, we test different measures to help managers to deal more effectively with each type of RB. We propose a proactive tactic (Challagalla et al. 2009) to transform indirect avengers into direct retaliators using social media, and we test the effects of different recovery levels for each type of RB (see H6).

## Overview of studies

We propose a multimethod approach to test our model (Hamilton 2016; Houston 2016). Study 1 examines the longitudinal effects of RBs on post desire for revenge using a field study (H1-H2). Study 2 extends the basic effects found in Study 1 with an experiment (H3) and tests the mediation effect with justice restoration (H4). Study 3 investigates the mediation effect with public exposure (H5) and tests the interactions effects between four recovery levels and the two types of RB (H6) on justice restoration and affect.

## Study 1: Longitudinal field study

### Conceptualization of the RBs

Study 1 aims to show the differentiated effects of direct and indirect RBs in a longitudinal setting with real customers (Hogreve et al. 2017). We investigate the effects of four RBs: two direct and two indirect (Gelbrich 2010; Grégoire et al. 2010). In relation to the direct RBs, *marketplace aggression* is defined as customers' deliberate actions to harm a firm's employees or property. The other direct RB is *vindictive complaining*, which occurs when customers voice their dissatisfaction in a way that causes inconvenience to employees. In terms of indirect RBs, we focus on *negative word-of-mouth*—that is customers' effort to share their negative experience with friends and family. *Third-party complaining for legal resources* is the other indirect RB—defined as customers' effort to use online resources to get access to legal expertise and discuss grievances with other customers.

### Hypotheses 1 and 2: The interaction between revenge behaviors and time

When customers engage in RBs at Time 1, the directness of these RBs should influence the evolution over time of their post desire for revenge in different ways. It should be noted that—given the correlational nature of Study 1—we cannot directly compare the trends for direct versus indirect RBs. We have to examine their trends separately, through two hypotheses (H1 and H2), because we simultaneously measured both

direct and indirect RBs at Time 1.<sup>1</sup> In Study 1, we cannot create two independent groups for direct versus indirect RBs.

Our examination of the different effects of direct RBs (H1) or indirect RBs (H2) builds on a known effect—i.e., time has a negative effect on post desire for revenge. This basic effect is well established in marketing and psychology (Grégoire et al. 2009; McCullough et al. 2007); a desire for revenge is associated with intense negative cognitions and emotions that are difficult to sustain over time. Accounting for this effect, we aim to show that each type of RB *interacts* with time in a different manner to predict the evolution of post desire for revenge.

H1 posits that direct RBs interact with time to predict post desire for revenge in a way that is consistent with a longitudinal “revenge is sweet” effect. Here, the more that customers engage in direct RBs, the *more pronounced* should be the decrease over time (i.e., the slope) of their post desire for revenge. We make this prediction because direct RBs are more effective at fulfilling one's desire for revenge through their favorable effect on justice restoration. The direct nature of marketplace aggression and vindictive complaining ensures—in customers' eyes—that the firm has been punished for the damages it has caused them. Here, revenge is viewed as more effective because customers perceive that the targets are made to understand why revenge was enacted against them (Gollwitzer and Denzler 2009; Gollwitzer et al. 2011).

H1: Direct RBs interact with time to predict post desire for revenge, such that the more customers engage in initial *direct* RBs (Time 1), the *more pronounced* will be the decrease over time of their post desire for revenge.

Through H2, we argue that indirect RBs interact with time to predict post desire for revenge in a way that is consistent with a longitudinal “salt water” effect. Here, the more that customers engage in indirect RBs, the *less pronounced* should be the decrease over time of their post desire for revenge. We make this prediction for two key reasons. First, through negative word-of-mouth and third-party complaining, customers do not openly express their anger at the firms; the distance that avengers keep with the target does not allow them restoring justice (Gollwitzer and Denzler 2009). Second, by engaging in indirect RBs, customers publicly expose the firm to others. This focus on “public exposure” does not provide a sense of closure for customers. Rather, it encourages customers to keep thinking about the failure by badmouthing it (Ward and Ostrom 2006). This persistent focus on fighting “slows down” the natural decrease in post desire for revenge. Formally:

<sup>1</sup> All the RBs are correlated in Study 1 because they are measured simultaneously for the same individuals; we cannot create a binary variable of direct versus indirect RBs. This comparison will become possible in our experiments (Studies 2 and 3), through H3.

H2: Indirect RBs interact with time to predict post desire for revenge, such that the more customers engage in initial *indirect* RBs (Time 1), the *less pronounced* will be the decrease over time of their post desire for revenge.

## Context and procedure

Study 1 is a longitudinal field study with complainers of two established websites. The first website ([consumeraffairs.com](http://consumeraffairs.com)) is a consumer news and advocacy organization, whereas the second website ([rip-off-report.com](http://rip-off-report.com)) reports customers' complaints. Study 1 is conducted in the context of a double deviation: both organizations offer their services once complainers have initially complained to the firm and failed to reach a settlement. The study consists of four series of questionnaires sent to participants every two weeks. The first questionnaire was sent to participants who posted a complaint within the preceding 10 days. The first questionnaire asks participants to rate how much they used different types of RBs at Time 1. Customers' desire for revenge is then repeatedly measured from Times 1 to 4.

A total of 2,386 emails were sent to the complainers of the two websites. A total of 435 participants completed the first wave of questionnaires, answering questions about RBs and desire for revenge (60% women,  $M_{\text{age}} = 44.12$ ,  $SD = 12.28$ ). The response rate for Time 1 was 18.2%, which is comparable to recent field studies published in marketing with response rates of 15% (Harmeling et al. 2015). From Time 2 to Time 4, respondents answered questions related to their desire for revenge. The number of respondents decreased from 300 in wave 2 to 217 in wave 3. Overall, 174 respondents (57.6% male,  $M_{\text{age}} = 46.67$ ) completed all the waves.

Study 1 relies on a mixed modeling approach, which is the method of choice to treat missing data because it incorporates the observations of all the participants at each point of time (Diggle et al. 2002). Accordingly, our analyses are based on 1126 observations over a two-month period. To account for potential non-response bias, we confirmed that the participants who did not complete all the waves did not differ from the participants who completed the four waves for all the key constructs collected at Time 1 ( $p$ 's > .10). This suggests that data were missing at random, and that the data were unbiased by attrition (McCullough et al. 2003).

## Measurement

Unless otherwise indicated, all measures are reflective scales based on seven-point Likert scales (1 = "Strongly disagree" and 7 = "Strongly agree"). Desire for revenge is measured using the scale developed by Aquino et al. (2001) and adapted by Grégoire et al. (2010). This scale includes three items: "I wanted to take actions to get the firm in trouble," "I wanted to

cause inconvenience to the firm," and "I wanted the firm to get what it deserves." The statistics relating to the scales (i.e., descriptive statistics and CFA) are provided in Web Appendix A. We controlled for the effects of the three fairness judgments related to the recovery efforts and failure severity using validated multi-item scales (Maxham and Netemeyer 2002).

**Direct RBs** Marketplace aggression is measured using four items drawn from a popular scale on workplace aggression (Douglas and Martinko 2001). The marketplace aggression scale is the only formative scale. Each item represents a behavior that can occur independently of each of the others, so the items of this scale are not expected to be highly correlated. In turn, we use a four-item scale to measure vindictive complaining (Grégoire et al. 2010; Gelbrich 2010); it includes items such as "I complained to the firm to give a hard time to the representatives."

**Indirect RBs** Negative word-of-mouth is measured with a three-item scale (Maxham and Netemeyer 2002; Gelbrich 2010), including items such as "I spread negative word-of-mouth about the firm." To measure third-party complaining, we used a scale with three items (Grégoire et al. 2009), including "I wrote a complaint to find a legal remedy."

## Results

We adopted an individual growth modeling approach to explore our longitudinal data. This approach allows for two levels of variation: between and within subjects. In our study, desire for revenge, taken over time, is nested within the individuals answering our questionnaires, forming a two-level hierarchical structure (Singer 1998). Table 1 contains coefficients of five models that are fitted to the data. The variable "time" captures the rate of change of the dependent variable over time. The basic model only includes individual covariates (i.e., RBs and control variables) and the growth parameter (i.e., time). In Models 1 to 4, the interactions between the individual RBs and time are added one at a time.

**Basic model** In the basic model, time and all RBs, except marketplace aggression, are significant predictors of post desire for revenge over time (see Table 1). None of the control variables are significant. To test H1 and H2, the interaction between each RB and time was included (i.e., Models 1 to 4). To illustrate the interaction effects, each RB was plotted in Fig. 2 (one standard deviation above or below the mean of each RB).

**Hypothesis 1** The interaction of aggression with time is examined in Model 1. Consistent with H1, this interaction is significant ( $\beta_{\text{aggression} \times \text{Time}} = -.16$ ,  $p < .05$ ). The desire for

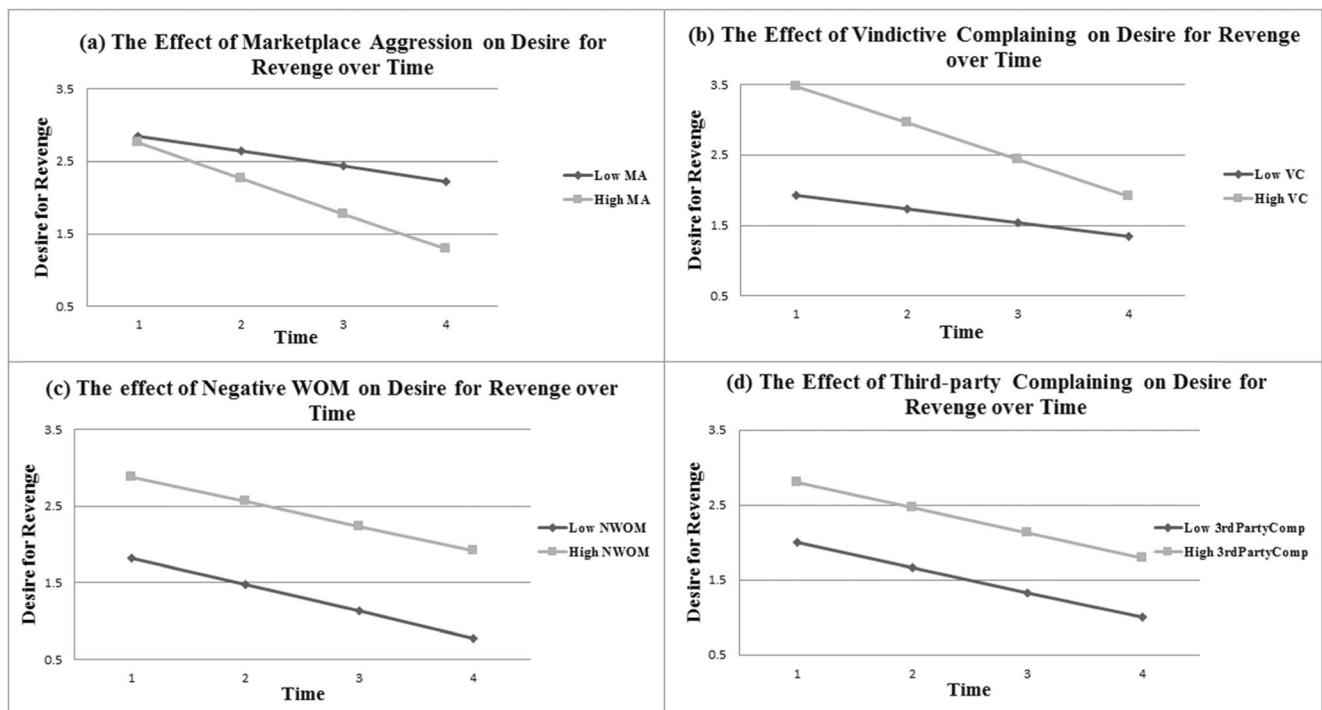
**Table 1** The effects of different revenge behaviors on desire for revenge over time (Study 1)

	Post desire for revenge				
	Basic model B	Model 1 B	Model 2 B	Model 3 B	Model 4 B
Intercept	2.11***	1.72***	1.82***	2.13***	2.10***
Time	-.38***	-.13	-.21*	-.40**	-.38***
Revenge behaviors					
Marketplace aggression (MA)	-.18	-.08	-.19	-.18	-.18
Vindictive complaining (VC)	.45***	.45***	.63***	.45***	.45***
NWOM	.23***	.23***	.23***	.23***	.23***
Third party complaining for legal source (3rdPartyComp)	.15***	.15***	.15***	.16***	.16**
Control variables					
Distributive Justice	-.12	-.11	-.11	-.12	-.12
Procedural Justice	-.18 (.07)	-.19 (.07)	-.19 (.07)	-.18 (.07)	-.18 (.07)
Interactional Justice	.05	.05	.04	.06	.04
Service Failure Severity	.06	.05	.06	.05	.06
Interaction of revenge behaviors with time					
MA x Time	–	-.16*	–	–	–
VC x Time	–	–	-.10**	–	–
NWOM x Time	–	–	–	.00	–
3rdPartyComp x Time	–	–	–	–	-.00

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

revenge of customers who engage more intensely in aggression decreases more rapidly over time (see Fig. 2a), compared with customers who engage less intensely in this RB. Figure 2a also shows that at Time 1, all customers had

almost the same level of desire for revenge. Compared to customers who used less aggression, the most aggressive individuals had a post desire for revenge declining more quickly with time.

**Fig. 2** The effects of different revenge behaviors on desire for revenge over time (Study 1)

In Model 2, the interaction between time and vindictive complaining is also significant ( $\beta_{\text{vind. comp.} \times \text{Time}} = -.10, p < .01$ ). Consistent with H1, the negative slope is more pronounced for customers intensely engaging in vindictive complaining, compared to individuals engaging less in this direct RB (Fig. 2b). Customers who engage more in vindictive complaining have a greater desire for revenge at Time 1, compared to those who use this direct RB less intensely. As a result of a sharper decrease in the desire for revenge in the high “vindictive complaining” group, there is no observable difference at Time 4.

**Hypothesis 2** To test H2, the interactions between time and each *indirect* RB are incorporated in Models 3 and 4. According to Model 3, the interaction effect between negative word-of-mouth and time does not achieve significance ( $p = .98$ ); the two slopes are parallel in Fig. 2c. We find the same effect for third-party complaining (Model 4). Again, the interaction effect between time and this indirect RB is not significant ( $p = .97$ ), and the slopes are parallel for different levels of third-party complaining (see Fig. 2d). Overall, H2 is not supported.

Although we do not find that indirect RBs affect the degree of the slope, we observe a pattern in mean difference that is worth attention. In both Models 3 and 4, the main effect of both indirect RBs ( $\beta_{\text{Negative word-of-mouth}} = .23, p < .001$ ;  $\beta_{\text{Third-party complaining}} = .16, p < .01$ ) remains significant and positive. These results indicate that the indirect RBs affect the mean values. We find (see Fig. 2c and d) that customers who use indirect RBs more intensely have a higher post desire at each point of time, compared to individuals who use these indirect RBs less.

## Discussion of Study 1

First, Study 1 confirms that time has a negative effect on post desire for revenge. Importantly, our results show that different RBs—direct versus indirect—are associated with distinct patterns regarding the evolution of post revenge desire. Consistent with H1, we find a significant interaction between time and direct RBs. Customers engaging more in direct RBs have a faster decreasing post desire for revenge over time compared to individuals engaging less in these RBs. This sharper reduction suggests that using direct RB has healing benefits.

Second, H2 is not supported; the interaction effects between time and indirect RBs are not significant and the decline in desire for revenge follows the same slope in both groups for both indirect RBs. However, the patterns of results illustrated in Fig. 2c and d reveal an interesting and consistent difference in mean values (instead of slope). We find that more engagement in indirect RBs is followed by amplified post desires for revenge at each

point of time. These results seem to fit the “salt water” metaphor.

Study 1 provides an initial test of the different effects of direct and indirect RBs on post desire for revenge. The key contribution of Study 1 is to show that different effects occur over time in a naturalistic setting with real complainers. However, this field study has many limitations that we address in our subsequent experimental studies.

## Study 2: The role of justice restoration

Study 2 addresses the limitations of Study 1 in several ways. First, it relies on an experimental design that directly contrasts the effects of direct and indirect RBs. In the rest of this research, the behaviors are manipulated (instead of being measured), so we have more confidence in the causality of our logic. Second, it documents the process at play by incorporating justice restoration and affect as key intervening variables. The incorporation of justice restoration is managerially relevant because firms have the ability to control this variable. Third, we use only two RB manipulations (direct and indirect) to provide a clearer manipulation of the directness of the RB. Fourth, the direct RB is different from marketplace aggression, which we could only measure with a formative scale in Study 1.

## Hypothesis 3: The contrast between direct vs. indirect revenge behaviors

Study 2 extends our logic by contrasting the effects of direct and indirect RBs on post desire for revenge, as well as two other relevant affective dependent variables. Previous research has directly examined the effects of RBs on individuals’ affects. Carlsmith et al. (2008) use positive and negative affects as their key dependent variables. Positive affect is defined as the extent to which a person feels enthusiastic and satisfied about a situation; negative affect is broadly defined as a subjective lack of pleasure that includes feelings of anger and frustration about a situation (Watson et al. 1988).

To extend H1-H2, Study 2 directly compares the effects of direct and indirect RBs. All participants read the same service failure situation and were randomly assigned to one of the two RB conditions. Building on our previous explanations, the direct RB condition (compared to the indirect RB condition) should help customers experience less post negative affect, more post positive affect and less post desire for revenge. Formally:

H3: Direct RB makes customers experience (a) less post negative affect, (b) more post positive affect, and (c) less post desire for revenge, compared to indirect RB.



## Defining justice restoration

Building on justice theory (Hammock et al. 1989; Stillwell et al. 2008), we posit that justice restoration is a key process variable explaining the differential effects of direct RBs versus indirect RBs. Justice restoration is a *global perception* that captures the extent to which customers perceive that their actions were effective at redressing the balance with a firm (DeWitt et al. 2008; Liao 2007). We use a global measure because it allows us to present our model with more parsimony, given its relative complexity. Such an approach has been used in marketing (DeWitt et al. 2008) and organizational behavior (Ambrose and Schminke 2009). Specifically, Ambrose and Schminke (2009) found that measuring an overall justice perception—instead of separate justice dimensions—is a better predictor of subsequent responses. The justice dimensions are strongly correlated with a global justice perception, which then becomes a better behavioral predictor. Conceptually, there is also a key difference between the three justice dimensions used in the recovery literature (Smith et al. 1999) and justice restoration. The three justice dimensions are judgments that customers make about the initial recovery (Smith et al. 1999), whereas justice restoration captures whether customers' actions were effective at redressing the balance with the firm (Komarova et al. 2018). In short, the three typical justice dimensions are antecedents of RBs, whereas justice restoration is an outcome of RBs. We are interested in the latter.

### Hypothesis 4: The mediation effect of justice restoration

When customers *directly* get revenge, the firm is aware of their actions, and these customers perceive that they have settled the score by hurting the firm. These customers find comfort in knowing that the firm understands that they are responsible for the caused inconvenience (Gollwitzer and Denzler 2009; Komarova et al. 2018). Direct RBs then should lead customers to feel that justice is restored. By contrast, the perception of justice restoration should be weaker after indirect RB. Although these covert behaviors could create damages for firms, they do not have the same restorative potential. After indirect RBs, customers are uncertain whether the firms will understand that they are at the origin of these consequences (Gollwitzer and Denzler 2009). It is not just a matter of the firm's suffering; it is more a matter of the firm's suffering *because of customers' actions*.

We argue for a double mediation process involving justice restoration and affect. The justice literature in marketing and organizational behavior has long insisted on the mediation role of affect; therefore, it appears important to incorporate this variable (e.g., Barclay et al. 2005; DeWitt et al. 2008; Gelbrich and Roschk 2011; McCullough et al. 2007). First,

justice perceptions are well known to be negatively related to negative affect (Walster et al. 1973), which in turn should sustain a desire for revenge (Grégoire et al. 2010). If justice is (not) restored as a consequence of direct (indirect) RB, customers should feel less (more) negative affect, and consequently have less (more) post desire for revenge. Second, customers should also feel more (less) positive affect if they perceive that justice is (not) restored to some extent. In turn, positive affect should reduce desire for revenge.

H4a: The effect of the directness of RBs on post desire for revenge is mediated by a “justice restoration (-) → negative affect” process.

H4b: The effect of the directness of RBs on post desire for revenge is mediated by a “justice restoration (+) → positive affect” process.

## Procedure

American adults were recruited from Qualtrics' online panel. Overall, 206 complete questionnaires were collected. The sample was 50% female, and the average age was 42.19 ( $SD = 14.20$ ). The study followed a pretest-posttest experimental design in order to compare the degree of change in desire for revenge and affect after direct versus indirect RB.

Participants read the scenario explaining the service failure at a “truck rental” firm (see Web Appendix B). They were asked to picture themselves in a situation in which their reservation was changed at the last minute, and even after complaining, they could not get a more convenient rental. Then, we measured their desire for revenge and affect (Time 1). We selected a double deviation context because such context naturally prompt RBs.

Participants were next randomly assigned to the direct or indirect RB condition (103 participants per cell). In the direct revenge condition, the customer gets back at the company by paying the rental fee with a large amount of small change. In contrast, in the indirect revenge condition, the customer gets back at the company by spreading negative word-of-mouth among his/her friends. Then, participants' desire for revenge and affects were measured again (Time 2). Finally, participants answered questions about justice restoration, protection of others, the directness check and some confounds.

## Measurement

We used the same scales for desire for revenge as in Study 1 ( $M_{\text{Time1}} = 4.23$ ,  $SD_{\text{Time1}} = 1.56$ ,  $\alpha_{\text{Time1}} = .85$ ;  $M_{\text{Time2}} = 4.61$ ,  $SD_{\text{Time2}} = 1.63$ ,  $\alpha_{\text{Time2}} = .93$ ). We also used the same scales as in Carlsmith et al. (2008) to assess affect. Participants rated to what extent they felt positive and negative on a 5-point scale anchored by *not at all* (1) versus *extremely* (5), both

before and after taking revenge. Positive affect was measured using three items: pleased, positive, and satisfied ( $M_{\text{Time1}} = 1.45$ ,  $SD_{\text{Time1}} = .93$ ,  $\alpha_{\text{Time1}} = .94$ ;  $M_{\text{Time2}} = 2.17$ ,  $SD_{\text{Time2}} = 1.21$ ,  $\alpha_{\text{Time2}} = .93$ ). Negative affect comprised two items: negative and irritated ( $M_{\text{Time1}} = 3.97$ ,  $SD_{\text{Time1}} = 1.16$ ;  $\alpha_{\text{Time1}} = .85$ ;  $M_{\text{Time2}} = 3.11$ ,  $SD_{\text{Time2}} = 1.31$ ,  $\alpha_{\text{Time2}} = .85$ ).

Justice restoration was measured with a four-item scale capturing a global perception (Ambrose and Schminke 2009). This scale includes “my reaction to the firm’s failure balanced our relationship,” “my reaction ensured that my loss is not the firm’s gain,” “my reaction made our relationship fair,” and “my reaction made me feel that the firm got what it deserved” ( $M_{\text{Time2}} = 3.92$ ,  $SD_{\text{Time2}} = 1.40$ ,  $\alpha_{\text{Time2}} = .86$ ). We included two items to measure the extent to which participants believed that their RB protected other customers. They read “I believe my reaction would stop the company from taking advantage of its customers,” and “I believe my reaction taught the company how to treat its customers” ( $M_{\text{Time2}} = 4.06$ ,  $SD_{\text{Time2}} = 1.74$ ,  $\alpha_{\text{Time2}} = .75$ ).

## Results

**Manipulation checks** To check the validity of our manipulation, we ran an ANOVA with a three-item scale that captures directness of a RB. These items measure whether the participants understood: 1) that their action affected the company immediately; 2) that the negative consequences of their reaction were apparent to the company; and 3) that the supervisor was aware of their action ( $M_{\text{Time2}} = 4.55$ ,  $SD_{\text{Time2}} = 1.66$ ,  $\alpha_{\text{Time2}} = .87$ ). Our directness manipulation had the intended effect<sup>2</sup> ( $M_{\text{Direct}} = 5.45 > M_{\text{Indirect}} = 3.64$ ;  $F = 86.178$ ,  $p < .001$ ).

In a short pretest ( $N = 111$ ; average age = 39.58; 77.5% female; recruited on Qualtrics), we validated the realism of our scenario and the presence of a double deviation. Participants perceived the scenario to be realistic ( $M = 5.13$  on a 7-point scale,  $SD = 1.76$ ,  $\alpha = .86$ ), a perception that was measured with 2 items: I find the incident (a) unbelievable (1) to believable (7); (b) impossible (1) to possible (7). The mean was different from the mid-point ( $p < .001$ ).

We also validated the presence of a double deviation. To do so, we measured the extent to which the participants felt they were victims of a failed recovery. We focus only on measuring the recovery because this situation logically implies the presence of a first service failure (Grégoire et al. 2009). The two-item scale included: (a) The rental company offered a resolution which was less than satisfactory (1) to beyond satisfactory

<sup>2</sup> To rule out the possibility of confounds, we tested that the directness manipulation did not affect participants’ perception about how powerful they were ( $M_{\text{Direct}} = 3.67$  vs.  $M_{\text{Indirect}} = 3.33$ , *NS*); whether they would be afraid of people’s judgment about the RB they took ( $M_{\text{Direct}} = 3.52$  vs.  $M_{\text{Indirect}} = 3.79$ , *NS*); or whether different RBs would affect their perception of how brave they were to stand up for their own rights ( $M_{\text{Direct}} = 4.92$  vs.  $M_{\text{Indirect}} = 4.52$ , *NS*).

(7); and (b) The recovery offered by the rental company was insufficient (1) to more than sufficient (7). The mean on this scale was below the mid-point ( $M = 2.11$ ,  $SD = 1.86$ ,  $\alpha = .98$ ;  $p < .001$ ). Overall, we found that the basic scenario included a failed recovery, which naturally implies a double deviation.

**Hypothesis 3** To test H3, we conducted three ANCOVAs, one for each dependent variable of interest at Time 2. In these models, the directness manipulation is a fixed factor, while the measure of the dependent variable at Time 1 is a covariate (Dimitrov and Rumrill 2003). Controlling for their measures at Time 1 (all  $p$ ’s  $< .001$ ), we find a significant main effect of our directness manipulation on negative affect at Time 2 ( $F(1,203) = 42.76$ ;  $p < .001$ ) and on positive affect at Time 2 ( $F(1,203) = 40.65$ ,  $p < .001$ ), but not on desire for revenge at Time 2 ( $F(1,203) = 2.39$ ; *NS*). Consistent with H3a and H3b, negative affect is significantly lower ( $M_{\text{direct\_Time2}} = 2.87 < M_{\text{indirect\_Time2}} = 3.34$ ) and positive affect is significantly higher ( $M_{\text{direct\_Time2}} = 2.46 > M_{\text{indirect\_Time2}} = 1.89$ ) after direct than after indirect RBs. Although the means are in the expected direction for desire for revenge ( $M_{\text{direct\_Time2}} = 4.47 \approx M_{\text{indirect\_Time2}} = 4.75$ ), the difference is not significant; thus H3c is not supported.<sup>3</sup>

**Hypothesis 4** Confirming our premises, justice restoration is significantly better after direct than indirect revenge ( $M_{\text{direct}} = 4.15$ ,  $SD = 1.38$ ;  $M_{\text{indirect}} = 3.69$ ,  $SD = 1.39$ ;  $t(204) = 2.38$ ,  $p < .05$ ). Adopting H4a, we tested the following path: “direct-indirect RBs  $\rightarrow$  justice restoration at Time 2  $\rightarrow$  residual negative affect  $\rightarrow$  residual desire for revenge.” To do so, in our mediation models, a dummy variable was created and named direct-indirect RBs (direct = 1 and indirect = 0). Consistent with our analyses for H3, residual negative affect and desire for revenge were used to control for negative affect and desire for revenge at Time 1. They were obtained by regressing negative affect (or desire for revenge) at Time 2 on negative affect (or desire for revenge) at Time 1. Since perceived justice restoration is measured only at Time 2, the variable itself is used in the mediation analyses. This mediated path was tested with the procedure PROCESS developed by Hayes (2013, Model 6). All our mediation analyses (in Studies 2 and 3) are based on 5,000 resamples generated by a

<sup>3</sup> We also compared the evolution of these three variables—between Times 1 and 2—for the two RB conditions. First, negative affect decreased in both conditions. However, this decrease was significantly more pronounced in the direct RB condition ( $M_{\text{Time2-Time1}} = -1.13$ ,  $SD = 1.41$ ) compared to the indirect RB condition ( $M_{\text{Time2-Time1}} = -.58$ ,  $SD = 1.25$ ;  $t = 2.93$ ,  $p < .01$ ). Second, positive affect was augmented in both conditions. However, this increase was significantly more pronounced for direct RB ( $M_{\text{Time2-Time1}} = 1.02$ ,  $SD = 1.26$ ) compared to indirect RB ( $M_{\text{Time2-Time1}} = .44$ ,  $SD = 1.06$ ;  $t = -3.59$ ,  $p < .001$ ). Third, a desire for revenge increased in both conditions. However, direct RB led to a significantly smaller increase in desire for revenge ( $M_{\text{Time2-Time1}} = .18$ ,  $SD = 1.36$ ) compared to indirect RB ( $M_{\text{Time2-Time1}} = .57$ ,  $SD = 1.39$ ;  $t = 2.038$ ,  $p < .05$ ). Overall, for the three variables of interest, there is always a more favorable effect for direct RB compared to indirect RB.

bootstrap procedure. The indirect path going through justice restoration and negative affect is significant ( $B = -.022$ ), with a 95% confidence interval between  $-.068$  and  $-.004$  (see Fig. 3a). This result is consistent with H4a.

H4b posits the following sequence: “direct-indirect RBs  $\rightarrow$  justice restoration at Time 2  $\rightarrow$  residual positive affect  $\rightarrow$  residual desire for revenge.” The path from RBs to justice restoration is significant ( $B = .46$ ,  $p < .05$ ), as is the path from justice restoration to residual positive affect ( $B = .40$ ,  $p < .001$ ). However, the path from residual positive affect to residual desire for revenge does not achieve significance ( $B = .04$ ,  $NS$ ). As illustrated in Fig. 3b, this indirect path is not significant ( $B = .007$ ; CI  $[-.022, .051]$ ); H4b is not supported. See Web Appendix C for a simple mediation model including only justice restoration.

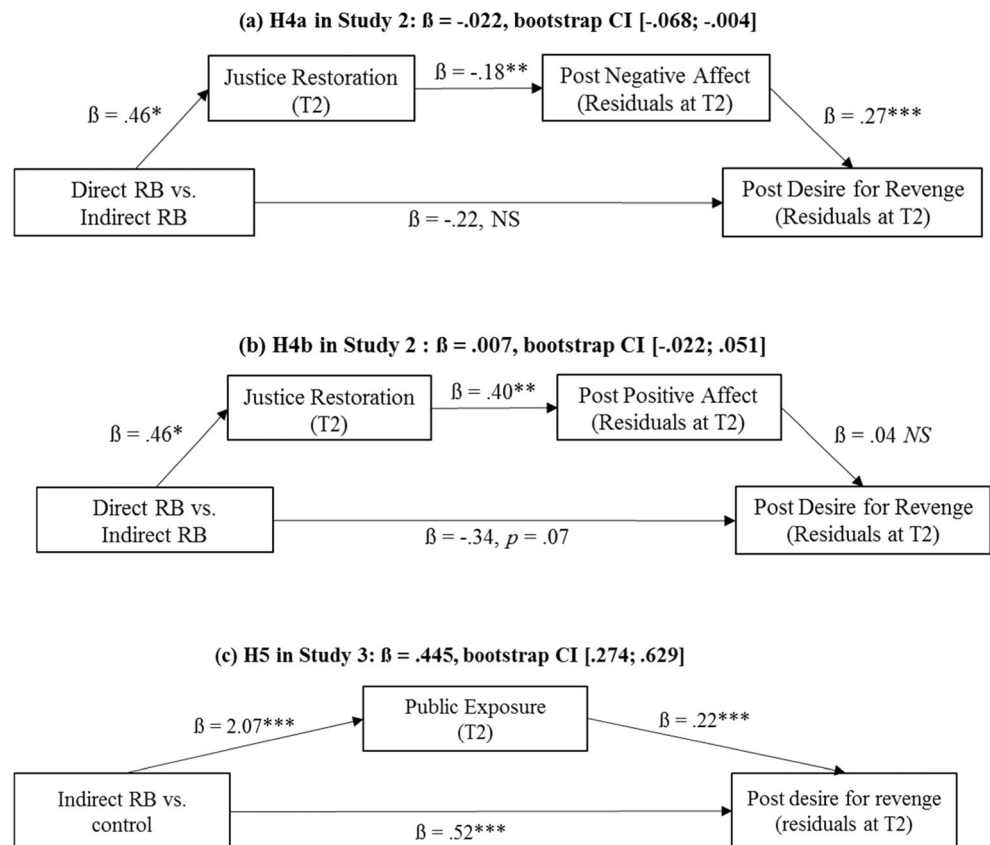
### Ruling out alternative explanations with a follow-up experiment

**Protection of others** We tested a rival mediator using the variable “protection of others.” Customers may perceive that direct RBs are more effective in protecting other customers, compared to indirect RBs (Ward and Ostrom 2006), which may in turn decrease their subsequent desire for revenge. However, the t-test did not reveal any impact of the directness manipulation on protection of other customers ( $M_{\text{Direct}} = 4.17$ ,

$SD = 1.86 \approx M_{\text{Indirect}} = 4.21$ ,  $SD = 1.86$ ;  $t = .187$ ,  $NS$ ). As a result, we discarded the possibility that protection of others is a mediator.

**Potential mediators** We further investigated—through a follow-up experiment—other mechanisms that could explain the effect of directness of RBs on post desire for revenge. Specifically, we examined the three following alternate mechanisms: revenge intensity, *Schadenfreude* and regret. First, revenge intensity is defined as the degree of inconvenience or loss caused to the firm (Maxham and Netemeyer 2002). Second, *Schadenfreude* is defined as the pleasure derived from others’ misfortune (van Dijk et al. 2011). Third, regret is a negative and cognitive-based emotion that an individual experiences when she/he realizes that the present situation would have been better if she/he had acted differently (Zeelenberg 1999). We used the same stimuli and procedures as in Study 2. In brief, 111 participants were recruited from Qualtrics’ online panel (55 for direct RB and 56 for indirect RB), their average age was 39.58 years, and 77.5% of them were female. After reading the scenario and the stimuli, the participants answered questions regarding the three aforementioned variables (see Web Appendix A for scales). Simple ANOVAs show that our directness manipulation did not affect revenge intensity ( $M_{\text{Direct}} = 3.41 \approx M_{\text{Indirect}} = 3.48$ ,  $NS$ ), *Schadenfreude* ( $M_{\text{Direct}} = 4.46 \approx M_{\text{Indirect}} = 4.98$ ,  $NS$ ), or regret

Fig. 3 Test of mediation effects in Studies 2 and 3



( $M_{\text{Direct}} = 3.75 \approx M_{\text{Indirect}} = 3.16$ , *NS*). These results rule out the possibility that these three variables play a mediation role.

## Discussion of Study 2

Study 2 confirms that direct and indirect RBs have different impacts on customers' affects (H3a and H3b). We note, at Time 2, less negative affect and more positive affect for direct RB compared to indirect RB. This difference is directionally consistent for desire for revenge, but not significant. Despite this null effect,<sup>4</sup> our results in Studies 1 and 2 largely confirm that direct RBs are associated with more favorable responses, compared to indirect RBs.

Study 2 also provides evidence for a process involving justice restoration. As per H4a, our mediation analyses showed that the directness of the behaviors led to justice restoration, which in turn determined post-revenge negative affect, finally leading to post desire for revenge. This result highlights the role played by the sequence “justice restoration → negative affect” as a key mechanism explaining the differential effects of direct and indirect RB. Such a result is consistent with justice theory, which has insisted on the key mediation role played by negative emotions (Barclay et al. 2005; Grégoire et al. 2010).

As per H4b, we did not confirm the indirect sequence going through positive affect. Although justice restoration led to more post positive affect, this last variable was not found to be related to post desire for revenge. These analyses ruled out the possibility that positive affect plays a role in explaining the variation in desire for revenge. We also ruled out the possibility that the effects of the RBs would be explained by the following variables: protection of others, revenge intensity, *Schadenfreude*, and regret. Although Study 2 extends the results of Study 1 and documents a key process at play, it also has limitations, which we address in Study 3.

## Study 3: Public exposure and managerial actions

Study 3 is a longitudinal experiment (see Fig. 4 for an overview) that addresses Study 2's limitations in three ways. First, we test the mechanism, based on public exposure, explaining the effects of indirect RB on post desire for revenge (at Time 2). Second, we investigate a practice that managers can adopt to change the focus of indirect avengers (at Time 3). We show that managers can use social media to transform indirect avengers to direct avengers. Third, we examine the differential

<sup>4</sup> We conducted additional analyses to better understand the null effect found for desire for revenge (H3c). As reported in footnote 3, we compared the evolution of this variable—between Time 1 and Time 2—for the two RB conditions. We also suggest that the effects for desire for revenge are less pronounced because this variable is more distant in the sequence suggested in H4. It should be noted that we pay special attention to retesting H3c in Study 3.

responses of direct versus indirect avengers to four recovery levels (at Time 3). Through this interaction (i.e., type of RB by recovery levels), we aim to show that direct avengers are especially sensitive to justice restoration.

## Hypothesis 5: The mediation effect of public exposure for indirect RBs (Time 2)

Study 3 assesses, through mediation analyses, a mechanism that explains the amplification effect of indirect RB on post desire for revenge. The process of justice restoration may not fully explain why customers engage in indirect RBs; it does not capture the benefits that customers could gain from indirect RBs. We argue that indirect avengers primarily seek to expose the offending firm to others. The literature has highlighted that third-party complaining for public exposure—the extent to which complainers contact a third-party to expose a firm's misbehavior—has been gaining in prevalence with social media (Ward and Ostrom 2006). In short, indirect RB should give more public exposure to a firm's failure (compared to direct RB).

We further argue that “public exposure” enhances a complainer's post desire for revenge. By trying to convince others of a firm's malevolence, complainers engage in a public crusade against firms. These complainers become active players who wish to transform their negative experience into a public crisis (Ward and Ostrom 2006). By doing so, they distance themselves from closure, and they keep “the fight” alive in the public arena. Formally:

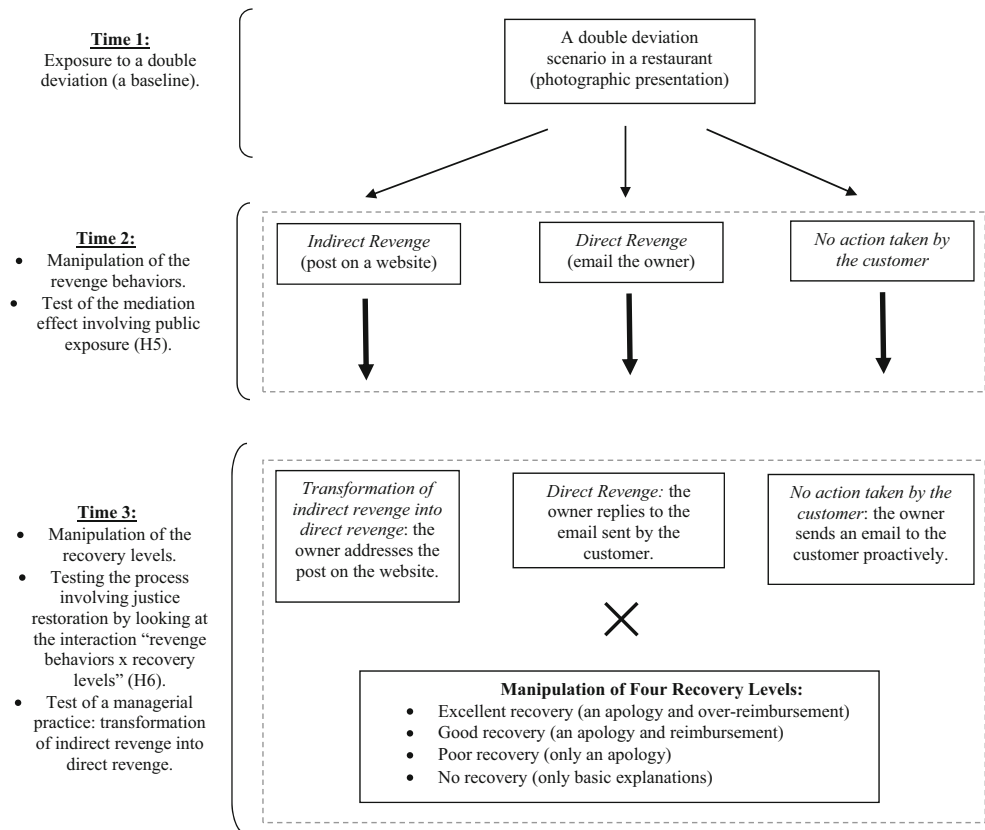
H5: The effect of indirect RBs on post desire for revenge is mediated by public exposure.

## Hypothesis 6: Manipulating justice restoration with four recovery levels (Time 3)

**Four recovery levels** At Time 3, we examine how the RB conditions react to four recovery levels (see Fig. 3). This manipulation allows better understanding the process involving justice restoration through moderation rather than mediation (as was done in Study 2). We expect that customers engaging in direct versus indirect RB should respond in different ways to recovery levels because they do not pay the same attention to justice restoration.

Recoveries can encompass many components (Davidow 2003). This research focuses on compensation, which is defined as a “monetary, cash equivalent or psychological benefit a customer receives from the company” (Gelbrich and Roschk 2011, p. 25). We focus on compensation because Gelbrich and Roschk's (2011) meta-analysis shows that this recovery is the most effective at redressing injustice. According to our definition, we manipulate the level of compensation—and by the same token, the level of recovery—by combining both a reimbursement and an apology. A reimbursement is a tangible

**Fig. 4** The design of Study 3 and its corresponding hypotheses



benefit (cash) that firms provide to redress a loss (Davidow 2003), whereas an apology is a message containing an acknowledgment of blame and includes expressions of sorrow (Roschk and Kaiser 2013). The recovery levels should influence our global measure of justice restoration.<sup>5</sup>

Specifically, we use four recovery levels. The “excellent recovery” is composed of an apology and over-reimbursement (i.e., 100% of loss plus a voucher), whereas the “good recovery” is composed of an apology and 100% reimbursement. The “poor recovery” includes only an apology, and the “absence of recovery” offers only basic explanations (without apology). The perception of justice restoration should increase with the successive recovery levels; only the “good” and “excellent” recoveries should satisfactorily fulfill the need for justice restoration.

**Transforming indirect avengers** We also test at Time 3 the effectiveness of a new practice—identifying and discussing with indirect avengers on social media (see Fig. 4)—that

<sup>5</sup> Building on Gelbrich and Roschk (2011), we highlight that firms’ recoveries are not synonymous with the different justice dimensions. For instance, Gelbrich and Roschk (2011) show that compensation influences all justice dimensions. We extrapolate from these results that compensation should influence our global construct of justice restoration. We slightly adapted our definition of justice restoration to the context of Study 3. This construct refers to the extent to which both customer behaviors and firm actions are effective at restoring the balance between customers and firms. It is still an outcome variable.

could help managers reduce the threat of indirect RB. Managers now have the monitoring tools (e.g., Google Alert, Sysomos) that could help them transform indirect RB into direct RB by reaching out directly to the individuals who complained on social media. These individuals belong to the condition that we label the “newly transformed indirect RB” at Time 3. By using the proper tools, managers can let these indirect avengers know that the firm is aware of their actions. By offering these customers a recovery, managers can also gear them towards a “justice restoration” mindset, which is easier to manage than public exposure.

**Hypothesis 6** We expect that the RB conditions interact with the recovery levels to predict perceived justice restoration (at Time 3). We formulate H6 mainly for justice restoration and negative affect, the key variables of the process identified in Study 2 (see Web Appendix C for complete mediation analyses). On the one hand, for “excellent recovery” and “good recovery,” we expect that the participants in *all* RB conditions perceive a sense of justice restoration and minimal negative affect. These two recoveries clearly redress injustice and damages caused by the organizations, regardless of the type of RB.

On the other hand, we argue that participants in the “direct RB” condition will respond less favorably to “poor recovery” and “absence of recovery,” compared to the other conditions (i.e., “newly transformed indirect RB” and “control”).

Participants who engage in direct RB are driven by justice restoration; and in this context, an apology or basic explanations are viewed as inadequate to redress the situation. These alleged recoveries should poorly restore a sense of justice for these individuals and make them feel more negative.

In contrast, customers in the “newly transformed indirect RB” may still see some restorative value in recoveries including a simple apology or basic explanations. Although these individuals were recently “transformed” to be more sensitive to justice restoration, they were initially motivated by public exposure. So, even when firms only apologize or offer basic explanations, these customers publicly demonstrate to their peers that they were worthy of a firm’s response. A similar logic can be used for participants in the control condition—for participants who did not complain to the firm. These customers should see some justice restoration just from the fact that the firm is proactively getting back to them after a failure, even if the offered recovery includes only an apology or basic explanations. Formally:

- H6: The recovery levels and the types of RBs (i.e., direct, indirect, and control) interact to predict justice restoration and negative affect:
- The “excellent recovery” and “good recovery” levels should lead to similar justice restoration and negative affect in all the revenge conditions.
  - The “poor recovery” and “absence of recovery” levels should lead to less justice restoration and more negative affect in the “direct RB” condition compared to the other revenge conditions.

## Design, stimuli, and sample

To test H5 and H6, we conducted a longitudinal scenario-based experiment based on a 3 (types of RBs) by 4 (recovery levels) between-subject design using photographic stimuli (see Fig. 4 and Web Appendix D). Previous research suggests that pictures evoke emotional and intention outcomes similar to those of actual service settings (Bateson and Hui 1992). At Time 1, we first exposed the participants to a double deviation in a restaurant. At Time 2, we manipulated RB; and at Time 3, we manipulated the four recoveries.

At Time 1, we exposed participants to a basic scenario in which we showed pictures of a couple who experienced a double deviation at a French restaurant. In this scenario, Sebastian and his wife were kept waiting in line. Their dissatisfaction rose when they were seated next to the washroom and the waiters ignored them for a long period. Sebastian unsuccessfully complained about the service. At this point, the participants completed a scale about their desire for revenge.

At Time 2, the participants were randomly assigned to the direct, indirect or control conditions. They were shown pictures related to each condition. In the direct condition, Sebastian directly complained to the restaurant owner by sending him an email. The wording of the message was sufficiently strong to cause inconvenience to the recipient. This condition relies on the assumption that Sebastian was so dissatisfied by his experience that he decided to write an email immediately upon his return home.<sup>6</sup> In the indirect condition, he posted a negative review on DinersChoice—a forum where customers share reviews about their dining experiences. The content of the post/email was the same in these two conditions. In the control condition, Sebastian took no action about his negative experience. Then, the participants reported their desire for revenge, affect, and perceived public exposure (at Time 2).

We manipulated the four recovery levels at Time 3 by showing pictures of the owner’s response. In the direct condition, the owner offered the recovery in his reply to Sebastian’s email. In the indirect condition, the owner replied to Sebastian’s negative review on the public forum; as discussed, this initiative transformed Sebastian’s indirect action into a form of direct response. In the control condition, the owner proactively offered a recovery in his reply to Sebastian’s reservation email. The participants again reported their desire for revenge, affect, and justice restoration (at Time 3), and they completed the manipulation checks.

Overall, 624 American adults (52 participants per cell) were recruited through Qualtrics’ online panel. The average age of the participants was 46.90 years ( $SD = 15.83$ ), and the sample was 67.9% female. All scales were adapted from Studies 1 and 2.

## Pretest for the basic scenario and the RB manipulation

We first conducted a pretest to validate the basic scenario and the RB manipulations. Overall, 155 participants (average age = 49.41 years, 64.5% female, Qualtrics’ panel) were exposed to the restaurant scenario and the RB manipulation, as previously described at Times 1 and 2 (see Fig. 4). We used the same three items as in Study 2 ( $M = 3.81$ ,  $SD = 1.62$ ,  $\alpha = .88$ ) to measure the directness of the RB manipulation. An ANOVA indicated a significant main effect of the manipulation ( $F(2, 152) = 10.07$ ;  $p < .001$ ), with the means in the

<sup>6</sup> The email in the complaining manipulation was including both descriptive and vindictive sections. We use such an approach to make the complaint realistic. We believe that Sebastian had to explain the bad service before using vindictive terms. Through his description, Sebastian used many aggressive expressions, such as “they made nonsense excuses,” “I can’t say enough how bad our experience was” and “I will never comeback there again!” However, we acknowledge that the content of the message was not strictly revenge oriented. In the last section of this article, we invite future research to examine the effects of other forms of complaint, not only RB.

expected direction ( $M_{\text{direct}} = 4.62 > M_{\text{indirect}} = 3.49 \approx M_{\text{control}} = 3.39$ ). Using the same scale as in Study 2, the participants also perceived the scenario to be realistic ( $M = 6.00$  on a 7-point scale,  $SD = 1.09$ ,  $\alpha = .86$ ). This score was significantly higher than the mid-scale point ( $p < .001$ ), and no difference among RB conditions was found for this construct (all  $p$ 's  $> .10$ ). Finally, we ensured that the RB conditions did not differ on the basis of revenge intensity (same scale as in Study 2:  $M = 3.45$ ,  $SD = 1.52$ ,  $\alpha = .97$ ;  $p = .138$ ).

## Results

**Manipulation checks for recovery levels** We checked the validity of the recovery manipulations by including at the end of the questionnaire a categorical question about the content of the recovery. The majority of the participants (i.e., 70% and more) selected the correct content corresponding to the recovery condition they had been assigned to (chi-square (12) = 1107.29,  $p < .001$ ). This manipulation did not have an effect on this question (chi-square (8) = 7.56,  $p = .48$ ). In the light of these analyses and our pretest, both manipulations appear effective.

**Hypothesis 3** We first replicated the basic effect of directness of RB on post desire for revenge at Time 2 ( $M = 3.90$ ,  $SD = 1.64$ ,  $\alpha = .84$ ). We focus on post desire for revenge because H3 was not supported for this variable in Study 2. We conducted an ANCOVA in which the RB manipulation had a significant impact on desire for revenge at Time 2 ( $F(2, 620) = 37.31$ ;  $p < .001$ ) after controlling for this measure at Time 1 ( $F(1, 620) = 555.22$ ;  $p < .001$ ). Consistent with H3c, the desire for revenge in the direct RB condition is less than the indirect RB condition ( $M_{\text{direct}} = 3.71 < M_{\text{indirect}} = 4.37$ ,  $p < .001$ ). We also found that the control condition ( $M_{\text{control}} = 3.41$ ) is associated with a desire for revenge less than both RB conditions (all  $p$ 's  $< .01$ ).

**Hypothesis 5** We measured public exposure at Time 2 by using a 5-item scale ( $M = 4.57$ ,  $SD = 1.80$ ,  $\alpha = .90$ ). Participants had to rate whether Sebastian reacted in the way he did “to make public the behaviors and practices of the restaurant,” “to report his experience to other customers,” “to spread the word about his misadventures,” “to spread negative publicity about the restaurant,” and “to be sure that he made his negative experience known to others” (Grégoire and Fisher 2008). An ANOVA revealed a significant effect of the RB manipulation on this variable ( $F(2, 621) = 147.10$ ;  $p < .001$ ). Participants perceived that indirect RB is the most effective way to expose a firm ( $M_{\text{indirect}} = 5.99$ ), as opposed to direct RB ( $M_{\text{direct}} = 3.75$ ,  $p < .001$ ) and the control condition ( $M_{\text{control}} = 3.92$ ,  $p < .001$ ). We did not find a significant difference between the direct RB and control conditions

( $p = .22$ ). We also found that public exposure is positively correlated with desire for revenge at Time 2 ( $r = .41$ ;  $p < .01$ ).

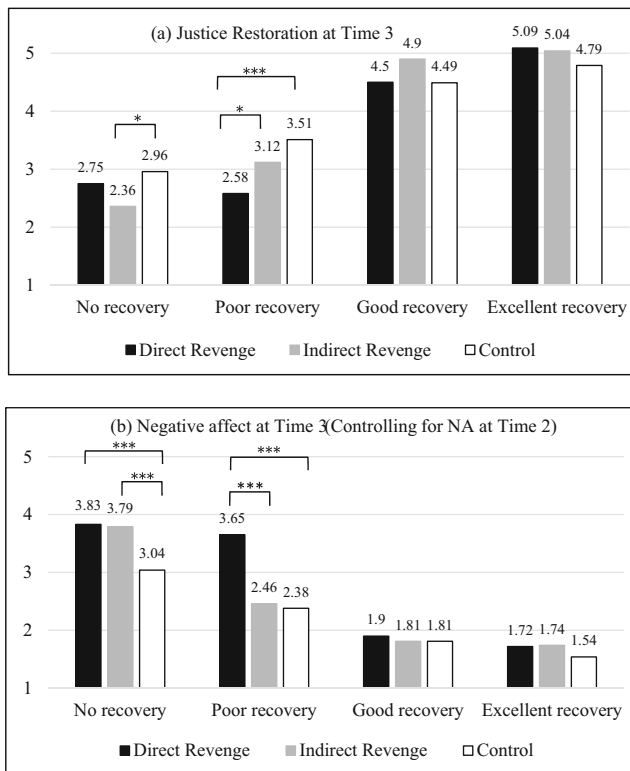
Using the control condition, we tested the mediation through public exposure separately for the effects of indirect RB (i.e., a dummy variable coded “1” for indirect RB and “0” for control) and direct RB (i.e., “1” for direct RB vs. “0” for control) on the residual of a desire for revenge at Time 2. As illustrated in Fig. 3c, the first indirect effect (i.e., “Indirect RB  $\rightarrow$  public exposure  $\rightarrow$  residual desire for revenge at Time 2”) was significant ( $B = .45$ ; 95% CI: [.2744 and .6288]), which is supportive of H5. However, the same indirect path was not significant for direct RB ( $B = -.03$ , 95% CI: [−.0948 and .0222]).<sup>7</sup> Web Appendix E shows that justice restoration does not play a role in the sequence involving public exposure.

**Hypothesis 6** We tested H6 using justice restoration at Time 3 ( $M = 3.66$ ,  $SD = 1.70$ ,  $\alpha = .91$ ), measured with the same scale as in Study 2. We conducted an ANOVA with the two manipulations and their interaction as independent variables (see Fig. 5a). The RB manipulation did not significantly affect justice restoration ( $F(2, 612) = 1.26$ , *NS*). However, we noted a significant main effect of recovery levels ( $F(3, 612) = 111.56$ ,  $p < .001$ ) and a significant interaction effect ( $F(6, 612) = 3.39$ ,  $p < .01$ ). As expected, each recovery level is perceived to restore justice significantly better than its preceding level. All three contrasts that compare one level with its following level are significant at 5% ( $M_{\text{no\_recovery}} = 2.69 < M_{\text{poor\_recovery}} = 3.07 < M_{\text{good\_recovery}} = 4.63 < M_{\text{excellent\_recovery}} = 4.97$ ).

Consistent with H6a, there are no significant differences among the three RB conditions for excellent and good recoveries ( $p$ 's  $> .10$ ). Consistent with H6b, we note distinctive reactions in the poor and no recovery conditions (see Fig. 5a). In the poor recovery condition, the direct RB condition is associated with less justice restoration ( $M_{\text{direct}} = 2.58$ ) than in the indirect RB condition ( $M_{\text{indirect-transformed}} = 3.12$ ,  $p < .05$ ) and the control condition ( $M_{\text{control}} = 3.58$ ,  $p < .001$ ). In this recovery condition, there is no difference between the indirect RB and the control conditions ( $p > .10$ ). In the absence of recovery, there is a significant difference between the indirect RB and the control conditions ( $M_{\text{indirect-transformed}} = 2.36$ ,  $M_{\text{control}} = 2.96$ ,  $p < .05$ ). There is no difference between the direct RB condition and the other conditions ( $p$ 's  $> .10$ ).

We replicated these analyses with negative affect, which was measured in the same way as in Study 2 ( $M = 3.22$ ,  $SD = 1.34$ ,  $\alpha = .85$ ). This ANCOVA reveals a significant main effect of negative affect at Time 2 ( $F(1, 611) = 85.64$ ,

<sup>7</sup> For completeness, we tested for serial mediation involving negative affect. The following path—“indirect revenge  $\rightarrow$  public exposure  $\rightarrow$  residual negative affect at Time 2  $\rightarrow$  residual desire for revenge at Time 2”—was not significant ( $B = .02$ ; 95% CI [−.0126, .0626]; 5000 resamples). This result suggests that the public exposure mechanism is mainly cognitive.



Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Fig. 5** Customers’ perception of justice restoration and negative affect as a function of the type of RB and recovery levels

$p < .001$ ), two significant main effects of the manipulations (RB manipulation:  $F(2,611) = 14.25, p < .001$ ; Recovery:  $F(3,611) = 106.47, p < .001$ ), and a significant interaction effect ( $F(6,611) = 5.79, p < .001$ ). Consistent with H6a (see Fig. 5b), we did not find any significant difference among the three RB conditions for an excellent recovery (all  $p$ 's  $> .10$ ) or for a good recovery (all  $p$ 's  $> .10$ ). Consistent with H6b, we found significant differences for the lower level recoveries. For the poor recovery, the negative affect is higher in the direct RB condition ( $M_{direct} = 3.65$ ) compared to the indirect RB condition ( $M_{indirect-transformed} = 2.46, p < .001$ ) and the control condition ( $M_{control} = 2.38, p < .001$ ). For the absence of recovery, the negative affect associated with the control condition is lower ( $M_{control} = 3.04$ ) compared to the direct RB condition ( $M_{direct} = 3.83, p < .001$ ) and the indirect RB condition ( $M_{indirect-transformed} = 3.79, p < .05$ ). We also replicated these analyses with positive affect and desire for revenge in Web Appendix F.

**Mediation analysis** Following the same procedure as in Study 2, the sequence “direct RB  $\times$  recovery  $\rightarrow$  justice restoration at Time 3  $\rightarrow$  residual negative affect at Time 3  $\rightarrow$  residual desire for revenge at Time 3” was significant (see Web Appendix C for details).

### Discussion of Study 3

First, Study 3 allows testing the different effects of direct RBs versus indirect RBs on post desire for revenge (i.e., H3c); we did not find this difference in Study 2. We confirm that direct RB leads to a lesser post desire for revenge compared to the indirect RB condition. Second, this study also shows that indirect RB leads to more public exposure than direct RB, and that higher public exposure substantially amplifies desire for revenge (H5). Indirect RB seems to fuel a higher post desire for revenge mainly through its accentuation of public exposure.

Third, Study 3 documents how direct and indirect avengers respond to different recoveries. On the one hand, superior recoveries are rewarded by similar responses among the three RB conditions (H6a). On the other hand, different reactions between the RB conditions can be observed for inferior recoveries. Our results are generally supportive of H6b. After a *poor recovery*, customers in the direct RB condition respond more negatively in comparison to the other conditions. After an *absence of recovery* (i.e., only basic explanations), the customers who did not complain (i.e., the control group) are less negative compared to the two RB conditions. Overall, we believe that these findings are important because they show a “flipside” of dealing with direct avengers. These results are further discussed in the General Discussion.

Finally, the strategy to transform indirect avengers into direct avengers seems promising; these transformed individuals respond positively to high recovery levels. Their response to low recoveries is also less negative than that of the individuals in the “direct RB” condition. We believe that Study 3 is the first attempt to test the effectiveness of this proactive strategy.

### General discussion

This multimethod research reconciles two opposite schools of thought about the effects of RB on customers’ post response (see Fig. 1): the “revenge is sweet” effect versus the “revenge is like salt water” effect. The evidence—from a field study and experiments—demonstrates that customers’ post responses differ on the basis of the *directness* of the RBs and the way the RBs are associated with justice restoration and public exposure. We believe this research is among the first to systematically examine post-complaint responses once customers have engaged in RBs (see Komarova et al. (2018) and López-López et al. (2014) for recent exceptions).

### Theoretical implications

**Hypotheses 1–3** In Study 1, customers strongly engaging in direct RBs report a faster decline of their post desire for revenge, compared to customers who engage less intensely in



these behaviors (H1). These results show the first evidence of a “revenge is sweet” effect in a natural setting. In contrast, customers strongly using indirect RBs report a higher post desire for revenge at each point of time, compared to customers using these behaviors less intensely. Although H2 is not confirmed as stated—we find a difference in means but not in slope—these preliminary results seem to support a general “salt water” metaphor.

In line with H1-H2, our experiments confirm through H3 that customers have less post negative affect (Study 2), more post positive affect (Study 2), and less post desire for revenge (Study 3) after enacting direct RBs, in comparison to indirect RBs. Overall, our first three hypotheses (H1-H3)—tested in three different studies, with two types of methods, in multiple contexts, and for different RBs—support our first contribution: the *directness* of the RB has different effects on customers’ post responses. Direct RBs lead to more favorable post responses and a “revenge is sweet” effect, whereas indirect RBs are associated with less favorable responses and a “salt water” effect. Prior work has argued that retaliating or complaining against firms could have cathartic effects on customers (e.g., Bechwati and Morrin 2003). Consistent with López-López et al. (2014), our research shows that such a cathartic effect is not universal; it only occurs for direct behaviors in this research. There is an important flipside: customers feel worse after enacting revenge in an indirect manner.

**Hypotheses 4–5** As our second contribution, our research documents the mechanisms that underlie the differentiated effects of RBs on post desire for revenge. After enacting direct RB, customers’ perception of heightened justice restoration decreases their negative affect, which in turn conditions their post desire for revenge (H4a). Our additional mediation analyses (see Web Appendix C) highlight the importance of accounting for post negative affect in this sequence. Indeed, once direct RBs have increased the sense of justice, the variable “negative affect” becomes a “bridge” linking justice perceptions and post desire for revenge (e.g., Barclay et al. 2005; McCullough et al. 2007). Post positive affect did not play such a role between justice restoration and desire for revenge, though (H4b). Justice restoration makes customers feel positive, but this positivity does not translate into a reduction of post desire for revenge. Here, we speculate that positive affect is more likely to influence reconciliation, rather than revenge.

Our analyses—through the test of H4-H5 and the rival sequences tested in Web Appendices C and E—reveal a double mechanism for indirect RB. First, the strongest effect is explained by public exposure, which in turn amplifies customers’ post desire for revenge (H5). Second, indirect RB amplifies post desire for revenge because it reduces perceived justice restoration, which increases post negative affect and post desire for revenge. When customers engage in indirect

RBs, they perceive less justice restoration because they are uncertain that the firm understands that they are at the origin of the inconvenience. We show such effect in Study 2 (H4a) and Web Appendix C.

To enhance our confidence about the centrality of these two suggested routes (i.e., H4a and H5), we took extensive measures to rule out rival explanations. First, we ruled out four different alternate mediators: protection of others (Study 2), regret (Studies 2 and 3), revenge intensity (Studies 2 and 3), and *Schadenfreude* (Study 2). Second, we also ruled out many alternative sequences of mediators, as presented in Web Appendices C and E.

**Hypothesis 6** Our third contribution directly addresses the managerial value of our research. We find that recovery levels play a moderating role, as this variable interacts with the directness of RB in Study 3. There is little literature that addresses the effectiveness of firms’ recoveries once customers have engaged in RBs. Prior researchers have been more interested in understanding and preventing the occurrence of these behaviors rather than testing what a firm can do to appease avengers. H6 addresses this gap.

On the one hand, excellent and good recovery makes *all* customers (i.e., direct, indirect, and control) feel that justice has been restored; and as a result, they *all* feel less negative (H6a). This result was obtained after indirect avengers were proactively contacted; we believe this action made indirect avengers more receptive to recoveries.

On the other hand, when the offered recoveries are less than satisfactory, we observe different reactions depending on the revenge conditions. In the direct RB condition, a poor recovery or the absence of recovery “backfires” for these customers; these offerings are perceived as insufficient to restore a sense of justice. In general, these customers respond less favorably to inferior recoveries, in contrast to the two other conditions.

By contrast, we believe that the more favorable response of indirect avengers is related to the concept of proactivity (Challagalla et al. 2009), which is gaining in importance given the possibility offered by social media. We assume that indirect avengers were happily surprised to be contacted by a manager; this initiative shows a firm’s sense of caring, even if it comprised only an apology. In addition, this proactive action publicly shows to the community that indirect avengers matter to the firm. That being said, these individuals respond as negatively (as direct avengers do) when the firm only contacts them to provide excuses, without including any apology. For these customers, a proactive approach needs to include a minimal recovery.

Finally, it is probably in the non-complaining group that the full strength of firm proactivity is understood. Since these customers did not complain, they seem grateful just to be contacted by the firm. These customers responded more favorably to both low-level recoveries (compared to the two

other conditions), even when these initiatives included only basic excuses.

Overall, we believe that a key contribution related to H6 is to provide a better understanding of the limits and opportunities associated with proactivity. The current research underlines an important contingency associated with the type of RB or complaining. Proactivity by itself—when it is not combined with a sufficient recovery—is mainly effective for individuals who did not take any *direct* measure against the firm. As a flipside, the same minimal recovery efforts can become frustrating for customers who took direct actions.

### Managerial implications

We suggest that firms adapt their responses according to the directness of the initial RBs.

**Direct avengers** This research suggests that direct RBs are less detrimental to firms. These actions are easier to circumscribe in a private manner, and they do not present the risk of becoming viral. Direct RBs are also associated with both a diminution in post negative affect and desire for revenge and an increase in post positive affect. A firm has a better chance to “nip in the bud” the vicious circle of revenge if it encourages customers to express their anger in a *direct* manner. Our findings suggest that by expressing their revenge *directly* to the firm, customers end up in a better emotional state (compared to indirect RBs).

For direct avengers, offering satisfactory or excellent recovery—based on 100% or more reimbursement—is the best approach to improve their sense of justice restoration. These recovery efforts lead to a substantial reduction in their post negative responses. For these customers, high recoveries should lead to a “revenge is sweet” effect because they are primarily concerned with justice restoration. The recovery based on over-reimbursement is especially effective for this type of customer; their perception of justice restoration is substantially higher after an excellent recovery ( $M = 5.09$ ) versus a good recovery ( $M = 4.50$ ).

However, there is a risk associated with offering an inferior recovery to direct avengers. Our results show that offering low-level recoveries can backfire with these individuals. When they judge that the offered recovery is insufficient to restore their sense of justice, then their negative affect and desire for revenge substantially increase. Direct avengers respond the most negatively to inferior recoveries (compared to indirect avengers and the control group).

**Indirect avengers** Online indirect revenge is difficult to predict and control, especially when these actions become viral. Here, our findings suggest that indirect RBs amplify customers’ post desire for revenge through their effects on public exposure. Our research indicates that justice restoration is not what these

individuals are primarily seeking when they engage in indirect RBs. These customers seek to keep their fight alive in a public forum.

What can managers do to solve the problem of indirect RBs? For indirect avengers who use social media, firms need to be proactive in identifying and reaching out to these customers. According to Falcon.io (2016), only half of the sampled managers thought that uncovering issues on social media platforms was important. Our findings differ from this view. We argue that proactive outreach is worth pursuing, and that it represents the starting point of the recovery strategy that firms should use with indirect avengers.

This recovery encompasses two key steps. First, firms need to monitor third-party social media platforms (e.g., TripAdvisor, Yelp, etc.) in order to identify indirect avengers. Social media monitoring tools—such as Google Alerts or Sysomos—can be used to perform this first step. Once the complainers have been identified, managers need to contact them personally. The basic idea is to transform indirect initiatives into direct RBs so that firms can benefit from the context in which justice restoration is more effective. The results of Study 3 suggest that these “newly transformed” indirect avengers, compared to direct avengers, respond as positively to superior recoveries; they respond even better to poor recoveries, including only an apology. In this last case, justice restoration for indirect avengers could be even less costly.

### Further avenues for research

First, the current research focuses mainly on contrasting the effects of direct versus indirect RBs. This approach could be extended by looking more formally at customers who do not enact revenge at all. More research is needed to better understand the intrapersonal upsides and downsides of getting revenge (directly and indirectly), as opposed to simply “letting go.” We also invite future research to examine the effects of other forms of complaint, beyond RB.

Second, future research could examine the effects of using both direct and indirect RBs together. Future research could determine what are the cumulative effects of these actions, and what are the best recovery strategies for individuals who use both RBs. In regard to recovery strategies, our research focused on compensation (based on reimbursement and apology) in a restaurant context. Here, scholars are encouraged to examine the role of other recovery dimensions (e.g., attentiveness, credibility, facilitation, etc.) in different contexts.

A third issue relates to the interplay between the intrapersonal and interpersonal consequences of revenge. The current research focuses on intrapersonal responses. However, revenge can also be intended to deter future aggressions and to regulate power (Chagnon 1988). Future research could examine how different types of RBs can map different functions. This last issue also raises the question of the role played by

people's lay theories about the functions of RBs. How accurate are customers at predicting that their "revenge will be sweet"?

Finally, this research focuses on post desire for revenge and its likely diminution after the enactment of RBs. In this regard, future research could examine how different actions lead to more constructive responses, such as forgiveness and reconciliation. It will also be interesting to examine how the direct contact with a service employee might help generate these responses.

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