

# A comprehensive model of customer direct and indirect revenge: understanding the effects of perceived greed and customer power

Yany Grégoire · Daniel Laufer · Thomas M. Tripp

Received: 24 April 2008 / Accepted: 29 December 2009  
© Academy of Marketing Science 2010

**Abstract** This article develops and tests a comprehensive model of customer revenge that contributes to the literature in three manners. First, we identify the key role played by the customer's perception of a firm's greed—that is, an inferred negative motive about a firm's opportunistic intent—that dangerously energizes customer revenge. Perceived greed is found as the most influential cognition that leads to a customer desire for revenge, even after accounting for well studied cognitions (i.e., fairness and blame) in the service literature. Second, we make a critical distinction between direct and indirect acts of revenge because these sets of behaviors have different repercussions—in “face-to-face” vs. “behind a firm's back”—that call for different interventions. Third, our extended model specifies the role of customer perceived power in predicting these types of behaviors. We find that power is instrumental—both as main and moderation effects—only in the case of direct acts of revenge (i.e., aggression and vindictive complaining). Power does not influence indirect revenge, however. Our model is tested with two field studies: (1) a study examining online public complaining, and (2) a multi-stage study performed after a service failure.

---

Y. Grégoire (✉)  
HEC Montréal,  
Montréal, Canada  
e-mail: ygregoire@wsu.edu  
e-mail: yany.gregoire@hec.ca

D. Laufer  
Yeshiva University,  
New York, USA

T. M. Tripp  
Washington State University,  
Pullman, USA

**Keywords** Customer revenge · Perceived greed · Customer power · Online complaining · Marketplace aggression · Customer rage · Service failure and recovery · Structural equation model

“It had never occurred to me to take a hammer to a phone company before, but I was just so upset...” (Tucker 2007, p. 1). These are the words of Mona Shaw, a respectable 75-year-old woman, who received national media attention for taking aggressive actions against her cable company, Comcast. After waiting two hours to talk to her local cable TV manager, Ms. Shaw became infuriated when she learned her situation was not sufficiently important to justify a quick reparation. As a sign of protest, Mona took a hammer and vandalized computers and other equipment in the Comcast office. As her story spread across the country, Ms. Shaw gained considerable support for her actions.

As illustrated by this story, customers can do more than passively exit a relationship or passively complain after poor service. Rather, some customers turn against firms and take actions to “get even” (Bechwati and Morrin 2003). In fact, customers seek revenge against firms, for example, by spreading negative WOM, insulting a frontline representative, or, as described in Ms. Shaw's story, vandalizing a firm's property.

Recognizing this important phenomenon, research has recently emerged on customer revenge or vengeance,<sup>1</sup> broadly defined as customers causing harm to firms after an unacceptable service (e.g., Zourrig et al. 2009). For instance, this stream has found that revenge is caused by a lack of “process” fairness (e.g., Bechwati and Morrin 2003;

---

<sup>1</sup> Revenge and vengeance are viewed as synonymous. For simplicity's sake, we use the label “revenge” hereafter.

Grégoire and Fisher 2008), blame attribution (e.g., Bechwati and Morrin 2007), and anger (e.g., McColl-Kennedy et al. 2009; Wetzer et al. 2007). In terms of concrete actions, customer revenge is a key driver of negative word-of-mouth (WOM), vindictive complaining, and switching for a suboptimal alternative (e.g., Bechwati and Morrin 2003; Grégoire and Fisher 2008).

Although progress on customer revenge is undeniable, much still needs to be learned. The existing literature has been developed from different angles—choice models (Bechwati and Morrin 2003) as well as exit-voice-loyalty (Huefner and Hunt 2000) and service (Grégoire and Fisher 2008) theories—and its fragmented nature now calls for an effort of integration. In this manuscript, we first synthesize the current knowledge into an extant “customer revenge” model, which serves as the foundation of our thesis. Importantly, we extend this model in three manners that address the broad issues of moral outrage, power and aggression, such as encountered in Ms. Shaw’s story and countless other anecdotes. Specifically, our extended model (1) incorporates *perceived greed* as the key motive underlying a desire for revenge, (2) differentiates between *direct* vs. *indirect* revenge behaviors, and (3) explains the role of *customer power* in predicting these two forms of revenge. Overall, these extensions offer a richer understanding of the revenge process, so managers can develop appropriate interventions that fit different forms of behaviors.

First, our model posits that customers naturally make judgments about the motives of a firm for causing a poor service (see Reeder et al. 2002, 2005). When customers perceive that firms were motivated by *greed*, this judgment has important moral implications that dangerously energize the revenge process (Bies and Tripp 1996; Crossley 2009). Here, a firm’s greediness is perceived when a customer believes that a firm has opportunistically tried to take advantage of a situation to the detriment of the customer’s interest. In this case, a customer experiences a form of “righteous anger” that makes him or her see revenge as morally justified and even desirable (Bies and Tripp 2009). Overall, we suggest that perceived greed is the most proximal cognition triggering customer revenge, even after accounting for well established cognitions (e.g., fairness, blame and severity) identified in the service literature. We believe that firms could draw valuable lessons from this extension, which is timely in light of the recent financial crisis that is attributable, at least in part, to Wall Street’s greed.

Second, in contrast with prior research that categorizes acts of revenge in a single category (e.g., Grégoire and Fisher 2008; Huefner and Hunt 2000), we propose a finer-grained two-category conceptualization: direct vs. indirect revenge behaviors. Direct revenge includes “face-to-face” responses—such as insulting a representative, hitting an object, or slamming a door—that puts intense pressure on

the frontline employees. Indirect revenge occurs “behind a firm’s back”—such as negative WOM—and is difficult to control. The distinction between these two types of behaviors is important because they call for different interventions. In addition to categorizing revenge behaviors, our extended model incorporates new manifestations (e.g., marketplace aggression), and examines their different antecedents.

Third, we examine the effects of *customer perceived power*, broadly defined as customers’ perceived ability to influence a firm in an advantageous manner (e.g., Frazier 1999; Menon and Bansal 2006), on the different revenge behaviors. Although power seems intuitively related to customer revenge, its precise effects have yet to be understood. Here, we suggest the effects of power are not straightforward and vary depending on the category of behaviors. In sum, we argue that customer power is an essential ingredient—through both main and moderation effects—to explain *direct* revenge. However, power should have little influence on *indirect* revenge, which remains available to both the powerless and the powerful.

In the following sections, we first present an extant model that we use to build our extended model of customer revenge. This model is then tested with (1) a study on online public complaining, and (2) a multi-stage study of service failure episodes.

### An extant customer revenge model

The purpose of our research is to develop an *extended* revenge model that highlights the role played by greed and power. In order to do so, however, we first integrate the previous customer revenge literature (Table 1) into an *extant* model (Fig. 1a) that serves as our starting point. The extant model is based on a “cognitions-emotions-actions” sequence and an “appraisal theory” approach, which are the dominant views in the literatures on service failure-recovery (e.g., Zourrig et al. 2009) and workplace revenge (e.g., Crossley 2009). This model posits that the key cognitions lead—directly and indirectly through anger—to a desire for revenge, which is the force leading to concrete behaviors. We explain this logic below.

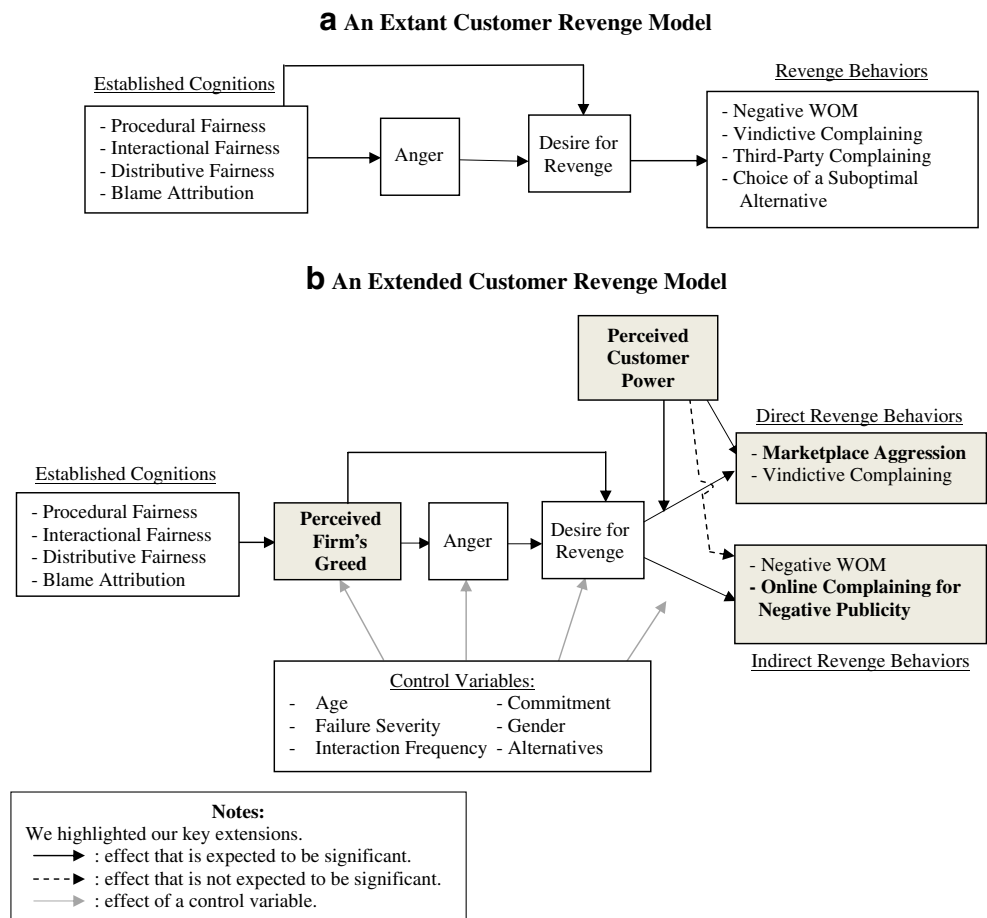
#### Basic definitions: desire for revenge vs. revenge behaviors

The definitions of *customer revenge* are consistent in the literature, and they *all* involve a customer exerting some harm to a firm in return for the perceived damages the firm has caused (e.g., Zourrig et al. 2009). Consistent with most articles, the extant model focuses on firms, rather than their employees, as targets of revenge. Customers become much more likely to seek revenge after a firm has failed to redress an initial service failure (e.g., Bechwati and Morrin 2003).

**Table 1** Customer revenge literature

Authors	Type of Article	Definition of revenge or related concept	Operationalization	Process suggested
Huefner and Hunt (2000)	Survey-based (two)	Customer retaliation: “an aggressive behavior done with the intention of getting even.”	Exploratory scales suggesting five behaviors: vandalism, trashing, stealing, negative WOM, and verbal attack.	Inequity → dissatisfaction → retaliatory behaviors
Bechwati and Morrin (2003)	Experiment-based (two)	Desire for vengeance: “the retaliatory feelings that consumers feel toward a firm, such as the desire to exert some harm on the firm” (p. 441).	A new five-item scale that “was modeled after the Stucless and Goranson (1992) scale ... designed to measure an individual eagerness to avenge” (p. 444).	Interactional fairness → desire for vengeance → suboptimal choice
Grégoire and Fisher (2006)	Survey-based (one)	Desire for retaliation: “a customer’s felt need to punish and make the firm pay for the damages it has caused” (p. 33).	Adaptation of a six-item revenge scale used by Aquino et al. (2001).	Controllability + unfairness → desire for retaliation → complaining behaviors.
Bechwati and Morrin (2007)	Experiment-based (three)	Desire for vengeance (see Bechwati and Morrin 2003) applied to a political context.	Same as Bechwati and Morrin (2003).	Salience affiliation + blame → damages to self-identity → desire for vengeance → voting for a less qualified candidate
Wetzer et al. (2007)	A survey, and an experiment	Revenge goal is associated with “aggressive goal”, and a “desire to hurt.”	A newly developed three-item scale.	Anger → revenge goal → negative WOM
Bonifield and Cole (2007)	An experiment and a content analysis	“Retaliatory behaviors occur when consumers try to hurt the firm” (p. 88).	A newly developed five item scale reflected in negative WOM, aggressive complaining, and receiving a cash discount.	Firm’s blame + firm’s recovery → anger → retaliatory behaviors
Grégoire and Fisher (2008)	Survey-based (one)	Customer retaliation “represents the efforts made by customers to punish and cause inconvenience to a firm for the damages it caused them” (p. 249).	The “retaliatory behaviors” concept is a second-order construct composed of negative WOM (3 items), third-party complaining (4 items), and vindictive complaining (3 items). Not measured.	Fairness judgments + relationship quality → betrayal → retaliatory behaviors
Zourrig et al. (2009)	Conceptual	Revenge: “the infliction of punishment or injury in return for perceived wrong” (p.6).		Harm appraisal → blame + future expectancy → anger → coping behaviors revenge

**Figure 1** Customer revenge models.



Accordingly, this extant model is developed after a service failure and a failed recovery, a situation also described as a “double deviation” (Bitner et al. 1990).

The extant model makes a distinction between a *desire for revenge* (e.g., Bechwati and Morrin 2003; Folkes 1984) vs. the observable *revenge behaviors* (e.g., Grégoire and Fisher 2008; Huefner and Hunt 2000). Here, we posit that a desire for revenge (i.e., a felt need to exert harm) increases the likelihood of “tangible” revenge behaviors. An emphasis on a *desire for revenge* (hereafter DR) is important because customers are not always able, depending on the context, to transform their desire into actions. Thus, the path “DR → revenge behaviors” leaves room for the incorporation of moderators (such as power) that could explain when a DR actually produces *real* manifestations that are designed to harm the firm.

The literature has identified *revenge behaviors* as a general construct that incorporates a variety of harmful actions available to customers (Huefner and Hunt 2000; Zourrig et al. 2009). The most studied behaviors are negative WOM (Grégoire and Fisher 2006; Wetzler et al. 2007), verbal attack (Bonifield and Cole 2007; Huefner and Hunt 2000), and switching for a suboptimal option (Bechwati and Morrin 2003). It should be noted that “relationship exit” and

“demands for reparation” are not part of this construct because they are not designed to retaliate against firms (Grégoire and Fisher 2008). These behaviors are driven by avoidance and reparation, rather than revenge.

The roles of the cognitions and anger in the extant model

The extant model simultaneously incorporates the effects of four cognitions that have been the most regularly examined in this literature. We name these variables the *established cognitions* of the extant model, and they belong either to justice theory (e.g., Bechwati and Morrin 2003; Grégoire and Fisher 2008) or attribution theory (e.g., Bechwati and Morrin 2007; Zourrig et al. 2009)—that is, the two fundamental theories used to study customer revenge.

Justice theory has been foundational in the revenge and service literatures (e.g., Tax et al. 1998), and it principally relies on three customers’ judgments: *distributive fairness* (i.e., the outcomes or the compensation received by customers), *procedural fairness* (i.e., the firms’ procedures, policies, and methods to address customers’ complaints), and *interactional fairness* (i.e., the manner in which frontline employees treat customers). Interestingly, judgments about the processes—the procedural and interactional aspects—are

more likely to create a desire for revenge, compared to the perceived outcomes (Bechwati and Morrin 2003). Processes are planned in advance, and they are more diagnostic of what firms truly think of their customers.

Research using attribution theory has principally relied on blame to explain customer revenge (Bechwati and Morrin 2007; Zourrig et al. 2009). Accordingly, *blame attribution* represents the fourth established cognition of the extant model, and is defined as the degree to which customers perceive a firm to be accountable for the causation of a failed recovery. When customers judge that a firm had control over an incident and did not prevent its occurrence, they make an attribution of blame (Weiner 2000).

In recent years, research has emphasized the importance of negative emotions (e.g., Chebat and Slusarczyk 2005) to explain the occurrence of customer responses after service failures. In this stream, the emotion anger—defined as a strong emotion that involves an impulse to respond and react—has been particularly popular (e.g., Bougie et al. 2003). Following these advances, anger has been found to be a strong predictor of customer revenge in many instances (Bonifield and Cole 2007; McColl-Kennedy et al. 2009; Wetzler et al. 2007; Zourrig et al. 2009). Capturing this emotional route, the extant model asserts that the established cognitions lead to anger, which in turn creates a DR.

Along with this emotional route, the extant model also incorporates a direct, cognitive route. Here, the established cognitions have also been found to create a DR, without any emotional involvement (Bechwati and Morrin 2007). This cognitive route can be explained by reasons such as: to teach a firm a lesson, to dissuade a firm from recidivating, and to restore social order (Bies and Tripp 1996). Accordingly, the extant model accounts for *both* cognitive and emotional routes.

### An extended model

The extant model is extended in three new manners that are highlighted in Fig. 1b. First, we argue that a customer's perception of a firm's greediness (*perceived greed*, for short) is particularly influential to trigger a DR. Second, we distinguish between *direct* and *indirect* revenge behaviors. Third, we examine the role of customer power in causing direct acts of revenge. As illustrated in Fig. 1b, the robustness of our extended model is tested by controlling for a variety of factors, including failure severity and commitment, among others.

#### Perceived greed in the extended model

**Definitions** Although theories that focus on causal factors (e.g., blame) are well established in the customer revenge

literature (e.g., Bechwati and Morrin 2007), workplace research suggests that customers could also make inferences about the motives of a firm, especially when a situation is viewed as harmful (Bies and Tripp 1996; Crossley 2009). Here, it is important to make a distinction between causal factors and motives; blame refers to *whether* the firm caused the poor recovery, whereas negative motives are about *why* the firm caused it (see Reeder et al. 2002, 2005). Research in organizational psychology has found that the inference of certain motives, especially greed and malice, plays an important role in the revenge process (Crossley 2009).

Given our focus on revenge against a *firm* (and not its employees), we emphasize the most likely perceived negative motive for a firm: *greed*. This specific motive is inferred when a customer judges that a firm has opportunistically tried to take advantage of a situation to strictly serve its best interest (i.e., profit) in a way that is detrimental to the customer (Crossley 2009). The practitioner literature has employed this motive to explain why customers may “hate” firms (McGovern and Moon 2007). For example, customers see firms as being “greedy” when they use questionable tactics—fine print, unreasonable fees and penalties, and binding contracts—to increase profits. Our model focuses on greed rather than malice (i.e., causing harm for pleasure) because the latter is unlikely for a firm. Indeed, firms are unlikely to “institutionalize” malice as a way to treat customers. Greed, which is fuelled by a desire to increase profit, is the most plausible motive.

It should be noted that greed differs from other cognitive triggers—such as “perceived betrayal” (Grégoire and Fisher 2008) and “self-identity damage” (Bechwati and Morrin 2007)—that have been recently identified in the literature. Given their relational basis, “betrayal” and “self-identify damages” are especially relevant to explain the revenge of customers with strong and self-defining affiliations with firms. Our current research, however, intends to build a “general” revenge model that suits any type of customer, regardless of the prior relationship.

*The Effects of Perceived Greed on Revenge* Although limited evidence can be found on this subject, there are reasons to believe that perceived greed is more proximal than the established cognitions of the extant model. Opportunistic and greedy behaviors violate “dealing honorably with others” (e.g., Bies and Tripp 1996, p. 249), and are unambiguously judged by victims as a violation of social norms. Bies and Tripp (2009) also describe greed as a moral judgment that triggers “righteous anger,” which becomes a strong force leading to revenge. Blame and fairness issues, on the other hand, can also be attributed to incompetence, and they do not have the same level of moral

implication. Previous research has found that morality vs. ability violations are perceived differently, and that morality violation creates a greater need for punishment than any ability violation (Wooten 2009).

In addition, the criminal justice system has long recognized the importance of offender motives in determining punitive damages, and greed represents one of the most commonly cited motives for criminal behavior (Povinelli 2001). Customers also learn about the key role of greed in the legal system through the media. For instance, high profile cases are extensively covered in the news such as the Exxon Valdez oil spill and the Enron and Bernie Madoff scandals. In sum, we believe that customers understand well the moral implications of greed, and they are likely to act like jurors—and recommend harsher penalties—when they perceive this motive plays a role in their service interactions.

Based on the above, we posit that perceived greed is the most proximal cognition triggering customer revenge, compared to the other established cognitions. In virtue of the logic exposed in the extant model, perceived greed is expected to influence a DR directly (i.e., a cognitive route) and indirectly through anger (i.e., emotional route). Formally:

H1: Compared to the established cognitions of the extant model (i.e., blame and fairness judgments), perceived greed has the most influence on anger and a desire for revenge.

*Linkage between the Established Cognitions and Greed*  
Although conceptually distinct, we also believe that greed and the established cognitions are related. Here, Crossley (2009) posits that before contemplating revenge, victims engage in a sense-making process that involves at least two cognitive steps. Zourrig et al. (2009) expose a similar logic with their model that involves two levels of linked cognitions. Building on these advancements, our extended model involves a similar sense-making process that first involves the determination of blame and fairness judgments (i.e., the first level of cognition). After a poor recovery, customers *first* establish whether the company was to blame and whether they were unfairly treated. Once they have determined blame and unfairness, customers then turn to an examination of a firm's motive and make an inference about its greediness (i.e., the second level of cognition).

Although the antecedents of perceived greed have not been examined extensively in the literature, preliminary support for this sense-making process exists in the work of Wooten (2009). In one of Wooten's experiments, interactional fairness impacted perceptions of negative motive (which is related to greed). When the participants did not receive an apology from the firm they rated the intent of the

service provider more negatively. Qualitative evidence also shows that strong attributions of blame can lead to perceptions of greed. In the aftermath of a poor recovery for which the firm is to blame, Ringberg et al. (2007) find that some customers start believing that firms tried to exploit them to make profit.

In sum, our extended model proposes a sequence “established cognitions (i.e., fairness and blame) → perceived greed.” However, we also recognize that the literature on the antecedents of perceived greed is rare, and that the reversed sequence could be argued. To account for this, we propose a comparison with rival models. We argue that the fit<sup>2</sup> of the hypothesized sequence is superior to that of rival sequences in which blame or fairness would be the most proximal cognitions. Formally:

H2a: The established cognitions (i.e., blame and fairness) are related to perceived greed.

H2b: The “blame and fairness → perceived greed” model fits the data better than rival models based on “perceived greed and fairness → blame” and “perceived greed and blame → fairness” sequences.

#### Direct vs. indirect revenge behaviors

As previously noted, our extended model makes a distinction between acts of direct revenge vs. indirect revenge (Fig. 1b). First, direct revenge can take the form of *vindictive complaining*, when customers voice their displeasure to frontline employees to inconvenience firms' operations (Grégoire and Fisher 2008). Customers can also directly retaliate by using other forms of aggression such as damaging a firm's property, willfully violating policies, hitting an object, or slamming a door. Influenced by the workplace literature (e.g., Douglas and Martinko 2001), the current research captures these behaviors with the construct *marketplace aggression*, defined as customers' actions that are designed to directly harm a firm or its employees. In sum, our model argues that these two behaviors represent most instances of “customer rage” (e.g., McColl-Kennedy et al. 2009).

Indirect revenge—which takes place outside a firm's border—includes *negative WOM*, when customers privately share their bad experiences with friends and relatives (Grégoire and Fisher 2006). Indirect revenge can also occur in an online public context. Specifically, our model also incorporates *online public complaining for negative publicity*, defined as the act of using online applications to alert the general public about the misbehavior of a firm (Ward and Ostrom 2006). Compared to negative WOM, online

<sup>2</sup> We validate the sequence of our extended model by relying on a comparison of fit between our model and rival structures (e.g., Cronin et al. 2000).

complaining is mass-public oriented, reaches a larger audience, and includes a clearer intent to “get the firm in trouble.” Although this online threat has been discussed (Grégoire and Fisher 2008), this behavior has been rarely conceptualized and measured.

#### The effects of customer power on direct revenge

Just because a customer desires to retaliate does not guarantee that he or she will, in fact, seek revenge. Other factors may explain when a DR leads to revenge behaviors, and the workplace literature provides insights about such moderation effects. In a qualitative study, Bies and Tripp (1996) found some reasons why vengeance-minded workers may not actually seek revenge, such as the immorality of revenge, and the fear of counter-retaliation (especially when they lack power). Supporting these qualitative accounts, “victims” have been found to be more inclined to seek revenge when they have power over their targets (Aquino et al. 2001, 2006). Building on this logic, we posit that customer power is a useful variable to understand when a DR results in concrete revenge behaviors.

*Definition of Customer Power* In general, power can be viewed as *potential influence*, that is, an individual’s relative capacity to modify a target’s attitudes and behaviors (e.g., Dahl 1957; Frazier 1999). Consistent with this view, Menon and Bansal (2006)—in their investigation of how customers perceive social power in services—find that high-power customers believe they can influence the situation to their advantage. Adapting these views to our context, we define *customer power* as a customer’s perceived ability to influence a firm, in the recovery process, in a way that he or she will find advantageous.

Such power may arise from a variety of sources (e.g., French and Raven 1959), such as access to information, one’s ability to generate threats, and the interdependencies created by providing business. A common customer threat in the marketplace is to withdraw one’s business. This threat is more realistic if the customer does not depend on firms for a service as much as the firm depends on the customer for continued patronage (Frazier 1999). Accordingly, this dependency should affect customers’ perception of their own power<sup>3</sup> (Menon and Bansal 2006).

To illustrate customer power and its link with dependency, consider the case of a wealthy investor having a small portion of her business with a young broker. Here, the investor does

not rely heavily on the broker because she has other alternatives, which is in contrast with the broker who largely depends on this investor for credibility and sales volume. If a service failure occurs—for instance, the broker fails to follow instructions and this failure results in losses—the high-power investor should be able to convince the broker to redress the situation to her advantage.

*Effects of Power* When a recovery fails, we posit that a customer’s power status affects the manifestation of revenge. Specifically, we expect that power has different effects on *direct* vs. *indirect* acts of revenge. Based on the workplace literature (Aquino et al. 2006; Tripp et al., 2007), we suggest that low-power customers are reluctant to engage in direct revenge because of a fear of counter-retaliation. That is, direct revenge is overt and can be traced back to specific customers, exposing their identity to the firm for targeting. Once targeted, they may not have sufficient power to withstand or discourage counter-retaliation. On the other hand, powerful customers are less likely to fear counter-retaliation, and as such, they are more inclined to engage in direct acts. Second, customer power should not matter in the case of indirect revenge. For indirect acts of revenge, the identities of the customers are usually unknown, making targeting difficult. Such avengers should not fear counter-retaliation, regardless of how powerful they feel. Therefore, we predict that power increases direct revenge, but does not affect indirect revenge.

We extend further this main effect and predict that power also moderates the relationship between DR and direct revenge. In short, powerless customers, even if they have a strong DR, will be reluctant to act on this desire in a direct manner because of the fear previously described. However, powerful customers have lesser fear, and their strong DR is more likely to be materialized in direct revenge. As previously explained, customer power should have little influence in the “DR → indirect revenge” path. Formally:

H3a: Perceived power is positively related to direct revenge behaviors (i.e., vindictive complaining and marketplace aggression) but not related to indirect revenge behaviors (i.e., negative WOM and online public complaining).

H2c: Perceived power only moderates the path “DR → direct revenge behaviors,” such as the path between “desire for revenge” and “direct revenge behaviors” is stronger (weaker) for customers with high (low) power.

## Methodology

Consistent with research in revenge (Grégoire and Fisher 2008) and service recovery (e.g., Tax et al. 1998), we conducted two field studies based on retrospective experi-

<sup>3</sup> Power is distinct from the concept of self-efficacy (Bandura 1977), which is defined as a belief that an individual can successfully perform a particular action (i.e., a perceived competence). Unlike self-efficacy, power does not rely only on one’s perceived competence, but it also explicitly takes into consideration factors in the environment—for instance, a customer’s perception of dependency toward the firm.

ences. After describing a recent service failure episode through an open-ended question, respondents were asked to recall their thoughts and emotions experienced at that time. In Study 1, we surveyed 233 online complainers, whereas in Study 2, we tracked 103 student complainers over time.

Although Studies 1 and 2 have similarities (i.e., field studies), they are also different and aim to complement each other. Study 1 surveys real complainers who publicly complain via an online website, and it possesses a high level of external validity. In turn, Study 2 is specifically designed to enhance internal validity by measuring different parts of the model at different times. Similar multi-stage approaches have been used in the past (Bolton and Lemon 1999; Maxham and Netemeyer 2002a) because they enhance one's ability to draw causal inference and rule out common method biases (Podsakoff et al. 2003). In the next sections, both studies are described, and their results are simultaneously presented for simplicity purposes.

#### Study 1: ConsumerAffairs.com study

In this study we surveyed customers who sent an online complaint to Consumer-Affairs.com, a popular website that aims to protect consumers by providing them with information and a public forum. This organization uses these complaints to write a weekly newsletter that is sent to approximately 30,000 subscribers. In addition, a select number of complaints are posted online. ConsumerAffairs.com advises customers to complain privately to firms as their first efforts. If these recovery efforts fail, then customers are encouraged to take public actions. Accordingly, all the complaints received should involve both a service failure and a poor recovery.

ConsumerAffairs.com gave us access to the customers who made an online complaint less than ten days before the administration of the survey. The recent nature of the complaint minimizes memory bias. The sampling frame was composed of 1,434 complainers. In the initial email, the potential respondents were invited to go to surveyz.com to complete a questionnaire. This invitation was followed by two reminders. Overall, 247 participants completed the survey, for a response rate of 18.1%. This level of response is comparable to that reported in previous service research ranging between 15% and 18% (Singh 1988). Fourteen respondents were eliminated for missing responses, and the final sample included 233 usable questionnaires.

Forty-one percent of the final sample was male, and the average age of the respondents was 43.88 years ( $SD=12.13$ ). On average, the respondents spent 17.76 h ( $SD=15.72$ ) per week on the Internet, and posted 1.01 ( $SD=3.42$ ) additional complaints in the last year. The products and services with the greatest number of complaints included: telecommunications, such as Internet, cable, and cell phones (17%);

automotive (13%); computers and electronics (12%); furniture and appliances (8%); and financial services (8%). In addition, 27% of the encounters involved a "face-to-face" interaction with an employee, as opposed to 73% of the encounters which involved online or phone interactions.

#### Study 2: a multi-stage approach with a student sample

Study 2 represents a multi-stage design that examines the components of our model at different time periods. A total of 103 students from a public American university participated in Study 2. To be eligible,<sup>4</sup> they were required to have experienced a "situation in which a service firm failed to serve them adequately, and when they complained, failed to redress the situation to their entire satisfaction" (instruction quoted). In addition, this interaction needed to occur in the two weeks prior the recruiting period. Participants received an incentive (\$10) for their participation at the end of the data collection.

This study was composed of two online questionnaires. At time 1 (t1), the participants were asked to answer questions about their cognitions, anger, and DR. At time 2 (t2), administered two weeks later, the participants answered questions about their behaviors. On average, the service failure and failed recovery reported by the respondents occurred 14 days before the first survey was administered. Forty-two percent of the respondents were male, and the average age of the respondents was 21.6 years. The products and services with the greatest number of complaints were restaurants (31%); telecommunications (22%); and automotive (8%). In addition, 72% of the encounters involved a "face-to-face" interaction with an employee, as opposed to 28% of the encounters which involved online or phone interactions.

#### Non-response bias and measurements

Both studies incorporated identical measures. The only exception was for the online public complaining for publicity, which was only measured in Study 1. Unless otherwise indicated, the measures are based on seven-point Likert scales. Most of the multi-item scales are reflective, and the only exception is marketplace aggression, for which we use a formative conceptualization. The questionnaires follow the chronological order of an actual customer experience and incorporate questions about the following stages: the relationship prior to the service failure, the service failure, the service recovery, and the behaviors. All the scale items (after

<sup>4</sup> We recruited undergraduate students from the summer session. We contacted all the instructors and provided them with an invitation slide. In addition, we personally visited the larger classrooms with more than 40 students. Overall, 114 students contacted us to be part of this study, and 103 students completed all the stages.



purification) are provided in [Appendix A](#). An earlier version of the questionnaires was pre-tested with 218 undergraduate students from an American university.

In both studies, potential non-response bias was assessed through an extrapolation method by comparing early and late respondents. No significant differences in the mean score ( $p > .14$ ) were found for any constructs between early and late respondents.

*Established Cognitions* Blame attribution was measured with a three-item scale developed by Maxham and Netemeyer (2002b). We also chose well-established scales from the literature to measure distributive fairness, interactional fairness and procedural fairness (Maxham and Netemeyer 2002a; Tax et al. 1998).

*Perceived Greed* The perception of a firm's greed was measured using four semantic differential items adapted from Campbell (1999) and Reeder et al. (2002). Using a seven-point scale, exemplar items were: "The company was primary motivated by... 'my interests' (1) vs. 'its own interest' (7)" and "The company 'did not intend' (1) vs. 'intended' (7) to take advantage of me." Because of its importance, this scale was made the object of specific psychometric tests that are described in the next subsection.

*Anger* This emotion was measured by asking respondents the extent to which they felt anger, outrage, indignation, and resentment (Shaver et al. 1987).

*Desire for Revenge* A DR was measured with an established five-item revenge scale that Grégoire and Fisher (2006) adapted to a service context. This scale was first developed by Wade (1989), and then intensively used in workplace research (e.g., Aquino et al. 2001, 2006) and social psychology (e.g., McCullough et al. 2001). This scale included items such as "I wanted to get even with the company." To examine further the relevance of this scale in service research, we performed a pilot study that indicated it converged with Bechwati and Morrin's (2003, 2007) consumer vengeance scale.<sup>5</sup>

<sup>5</sup> We examined the convergent validity of a DR scale by comparing it with the vengeance scale of Bechwati and Morrin (hereafter BM). We performed a study in which 49 students had to read a scenario about a failed recovery, and then answer questions about the two scales. As expected, the DR scale ( $\alpha = .93$ ;  $M = 3.56$ ;  $SD = 1.55$ ) was highly correlated at .82 ( $p < .001$ ) with BM's scale ( $\alpha = .81$ ;  $M = 3.27$ ;  $SD = 1.30$ ). A principal component analysis revealed two factors, however. All the items of the DR scale (loadings between .80 and .93) and the three positive items of BM (between .64 and .85) loaded on the first factor, whereas the two negatively worded item of BM (between  $-.78$  and  $-.88$ ) loaded on the second factor. In sum, these two scales converge, although they somewhat differ by the use of the negatively worded items.

*Perceived Power* We developed a new four-item scale that included the item: "Through this service recovery, I had leverage over the firm." This scale was developed following a thorough and systematic approach that is described in the next session.

*Direct Revenge Behaviors* For marketplace aggression, we adapted four items of the aggression scale developed by Douglas and Martinko (2001). This scale included items such as "I have damaged property belonging to the firm." A formative conceptualization is appropriate because this scale includes aggressive behaviors that can be independent of each other (Bollen and Lennox 1991). Indeed, a customer could damage a firm's property without bending its policies, or vice versa. In turn, vindictive complaining was reflective, and it was based on a three-item scale developed by Grégoire and Fisher (2008).

*Indirect Revenge Behaviors* Negative WOM is measured by adapting a three-item scale developed by Maxham and Netemeyer (2002b). In turn, online public complaining for spreading negative publicity was developed based on interviews with five website managers, who provided insights about the face validity of this scale. Prototypical items of this scale included "I complained to the website to make public the practices of the firm."

*Control Variables* We controlled for the relational context by examining the effects of *prior* relationship commitment and interaction frequency. Relationship commitment (i.e., a customer's willingness to maintain a relationship with a firm) was measured by an established three-item scale (De Wulf et al. 2001) (see [Appendix A](#)), whereas interaction frequency was measured with the question "how many times in the last 12 months did you interact with the service firm?" We also controlled for failure severity, a variable that was found to affect customer responses to service recovery (Smith et al. 1999), and for the presence of perceived alternatives. Established scales were used to measure these variables (see [Appendix A](#)). Finally, we controlled for the effects of age and gender on all endogenous variables (Aquino et al. 2001).

### Specific measurement models for customer power and perceived greed

Because of their importance in the extended model, we perform specific confirmatory factor analyses for the power and greed constructs. The tests for all the scales follow.

*Perceived Customer Power* We drew seven items from our definition of power, for which the face validity was assessed by three experts in the field. It was suggested to

drop one item at this stage, which left six initial items. Then, the dimensionality of this six-item scale was assessed in our pretest data with a series of confirmatory factor analyses (CFAs). To examine further the nomological validity of power, we added to the CFAs a three item scale<sup>6</sup> that measures a firm's dependency. Although power and firm's dependency are distinct constructs, they are also related (as previously explained): the more dependent is a firm, the more power a customer should hold over it. Next, in the CFA models, we sequentially drop two power items: one because of a poor loading (.49) and another because of high correlated error terms. The final seven-item CFA—power with four items and firm's dependency with three items—model produces satisfactory fit with a comparative fit index (CFI) of .97, a Tucker–Lewis index (TLI) of .95, a root mean square error approximation (RMSEA) of .08, and a  $\chi^2$  of 34.61 ( $df=13$ ;  $p=.001$ ). In terms of internal consistency, perceived power ( $M=3.40$ ;  $SD=1.55$ ) and firm's dependency ( $M=3.22$ ;  $SD=1.52$ ) have Cronbach's alphas of .88 and .76, respectively. In terms of convergent validity, the loadings ( $\lambda$ ) are large and significant ( $p<.001$ ), and the average variance is greater than .5 (power=.65; dependency=.53). As a sign of discriminant validity, the covariance ( $\Phi$ ) of power and dependency is significantly less than one ( $\Delta\chi^2 [1]=11.80$ ;  $p<.001$ ). As evidence of nomological validity, their correlation is positive and moderate ( $r=.31$ ,  $p<.001$ ). Overall, these tests provide confidence in the construct validity of our power scale.

*Perceived Greed* We validate our “perceived greed” construct by demonstrating its unique dimensionality compared to blame and customers' trust. Although blame and greed are distinct, both are judgments related to the current service failure episode, and they should be moderately correlated. We also expect *customers' trust* (i.e., confidence that a firm is dependable and can be relied on) and perceived greed to be distinct constructs. Customers' trust is a *cumulative* judgment that is built on all *prior* interactions with firms. In contrast, perceived greed is a motive that only relates to the *current* service episode. Although *prior* trust may affect the judgments about a current recovery interaction (Tax et al. 1998), these constructs remain conceptually different, and should not be strongly related.

To test these predictions, we perform a CFA model with trust (four items), perceived greed (four items), and blame (three items) in Study 1.<sup>7</sup> This eleven-item CFA fits the data

well with a  $\chi^2$  of 84.97 ( $df=41$ ,  $p=.000$ ), a CFI of .97, a TLI of .96 and a RMSEA of .068. In terms of convergent validity, all the loadings ( $\lambda$ ) are large and significant, and the average variance is greater than .5 for all constructs (i. e., perceived greed=.62; blame=.57; trust=.78). The Cronbach's alphas of greed, blame and trust are respectively of .85, .72 and .93. The covariances ( $\Phi$ ) between the three constructs are significantly less than one (all  $p<.001$ ). Consistent with our predictions, greed is moderately correlated with blame ( $r=.41$ ,  $p<.001$ ), but uncorrelated with trust ( $r=-.09$ ,  $p>.20$ ). In sum, these tests support the unidimensionality of the greed scale.

## Results

Partial least square vs. covariance-based structural equation models (SEMs)

To test our hypotheses, we combine the advantages of two SEMs: partial least square (PLS) and covariance-based (e.g., LISREL) models. PLS and covariance-based SEMs have different objectives that have the potential to complement each other (e.g., Chin 1998).

First, PLS is based on an iterative combination of principal components and regressions, and it aims to explain the variance of individual constructs (Chin 1998; Fornell and Bookstein 1982; Hulland 1999). Because of a “localized” estimation algorithm, PLS enables the incorporation of a large number of constructs for a smaller sample size, which is ideal for the examination of a comprehensive model. Compared to covariance-based models, Reinartz et al. (2009) find that PLS has greater statistical power, and they recommended this approach for research with smaller sample size and emphasis on prediction. Because of its reliance on regressions, PLS is also robust toward the violation of the normality assumption and is particularly effective to deal with formative constructs. Because of these advantages, PLS has gained in popularity in marketing (see Reinartz et al. (2009) for an effective overview).

In turn, covariance-based models are concerned with comparing the reproduced and observed covariance matrices, and they offer measures of overall fit (Chin 1998). Because of this characteristic, they are particularly appropriate for the overall test of a theory (Fornell and Bookstein 1982), as well as a comparison with rival structures (Cronin et al. 2000). This SEM also offers procedures to account for common method biases (Podsakoff et al. 2003). However, covariance-based models are more constraining (compared to PLS), and they may fail to converge with large models and more restrained sample sizes.

In our research, we capitalize on the strengths of both methods. We first perform comprehensive PLS models

<sup>6</sup> This construct is measured with a three-item scale including “The seller needed to continue business with me more than I needed to continue business with it,” and “The seller needed my continuing business.”

<sup>7</sup> We used the four-item scale developed by Sirdeshmukh et al. (2002), which includes four semantic differential items, such as “The firm was undependable vs. dependable” ( $M=4.84$ ;  $SD=1.53$ ;  $\alpha=.93$ ).

(with eighteen variables) in which we validate the scales and assess the *relative* influence of the core variables. This first step enables us to identify the most important variables in the revenge process. Then, we provide a test of the core revenge process—with only the key variables—with a covariance-based approach, which can be viewed as more theory-driven. In this second step, we compare the “fit” of our extended model with two rival models, perform subgroup analyses (across both studies), and control for common method bias.

#### Validation of all reflective constructs with PLS

First, we evaluate the adequacy of *all* our reflective measures with the parameters provided by PLS. For both studies, we estimate the reliability of the individual items, as well as the internal consistency and discriminant validity of the constructs (Hulland 1999). These tests are not reported for formative and single item measures because they are not appropriate in these cases (Bollen and Lennox 1991). Descriptive statistics and correlations are displayed in Table 2.

To assess item reliability, we examine the loading of the measures on their constructs (see Appendix A). Almost all of them are greater than the .7 guideline, in both studies. The rare loadings that do not meet this guideline have acceptable values (i.e., greater than .65). Then, Fornell and Larcker’s (1981) measure of internal consistency was employed. The internal consistency values of all the reflective constructs exceed the .7 guideline (see Appendix A).

The discriminant validity of the construct is assessed by comparing the square root of the average variance extracted from each construct with its correlations with the other constructs (Fornell and Larcker 1981). All values representing the square root of average variance extracted are substantially greater than their respective correlations (see columns in Table 2). In sum, all reflective constructs have appropriate psychometric properties in both studies.

#### PLS: the initial test of our models

Figure 2 presents PLS models that test the hypothesized sequence based on two-sided tests.<sup>8</sup> Only failure severity is presented as a control variable in Fig. 2. The other control variables are *not* graphically presented because their effect is minimal. To our knowledge, these PLS models constitute the most comprehensive customer revenge models, with 18 and 17 constructs for Study 1 and Study 2, respectively. These models are useful because they delineate, in two

different samples, the relative position of each construct. Our extensions are highlighted.

*Effects of Perceived Greed (H1)* At the core of both models, perceived greed has a positive and direct effect on a DR ( $p < .01$ ). Greed is also positively related to anger ( $p < .05$ ), an emotion that has a significant effect on a DR ( $p < .001$ ). In sum, perceived greed is a cognition that influences a DR both directly and indirectly, through its effects on anger, and these effects are consistent across studies.

To test H1, we add direct links from the four *established* cognitions to DR and anger. In other words, all the cognitions (i.e., three fairness judgments, blame, and greed) were modeled as *direct antecedents* of anger and DR in this model. If any of the established cognitions are more influential than greed, their paths would be significant, and the effects of greed would decrease or disappear (White et al. 2003). Consistent with H1, none of these additional links achieve significance ( $p > .22$ ), and the effects of greed on DR ( $p < .05$ ) and anger ( $p < .05$ ) remain positive and significant. In sum, perceived greed appears as the most proximal cognition—that it is to say, the most likely to *directly* trigger a DR and anger in both models.

*Linkage with the Established Cognitions (H2a)* Although none of the established cognitions are found to *directly* affect anger and a DR, many of them played a role in the revenge process by affecting perceived greed, which is consistent with H2a. In terms of fairness antecedents, both procedural fairness ( $p \leq .05$ ) and interactional fairness ( $p < .05$ ) are negatively related to greed, whereas distributive fairness does not have a significant effect on this variable ( $p > .19$ ). This set of results is consistent with the literature that shows that judgments about the *process*—compared to the *outcomes*—are more influential in the revenge process (Bechwati and Morrin 2003). In turn, we found that blame is positively related to greed in both studies ( $p < .01$ ).

*Direct Revenge and Power (H3a)* The direct revenge behaviors tend to be caused by a DR and also power. Supporting H3a, power has significant effects on all the *direct revenge* behaviors in both studies—vindictive complaining (all  $p < .05$ ) and marketplace aggression (all  $p < .001$ )—but no significant effects on the *indirect revenge* behaviors ( $p > .63$ ). As expected, a DR influences most of direct revenge behaviors ( $p < .05$ ). The only exception is the link “DR → marketplace aggression” that fails to achieve significance in Study 1 ( $p = .21$ ).

*Indirect Revenge and Severity* As expected, a DR influences all indirect revenge behaviors ( $p < .01$ ) in both studies. Surprisingly, we also found that *failure severity* was a key antecedent of *indirect revenge* behaviors—negative WOM

<sup>8</sup> This research uses bootstrapping (300 runs) to assess the significance of the parameters.

**Table 2** Descriptive statistics and correlation matrix

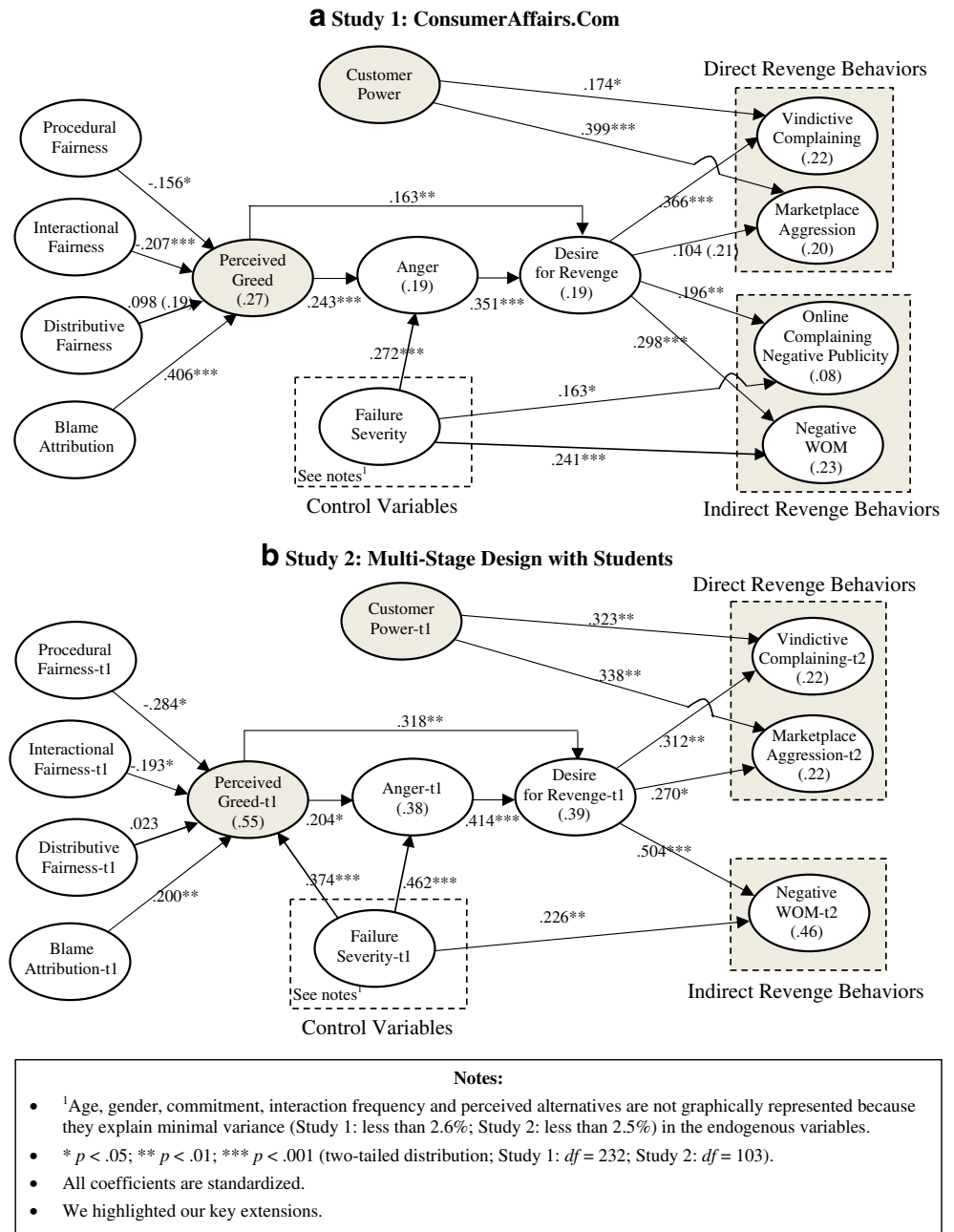
Construct scale (items)	Study 1		Study 2		Correlations														
	M	SD	SRAVE <sup>1</sup>	M	SD	SRAVE	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived greed (4)	5.6	1.5	.84	3.6	1.6	.86		.37	.47	.48	.33	.19	.32	–	.52	–.48	–.58	–.46	–.16
2. Blame (3)	6.4	1.1	.82	5.9	1.1	.85	.34		.21	.23	.28	–.07	.17	–	.23	–.09	–.30	–.19	.03
3. Anger (4)	5.6	1.8	.86	4.1	1.8	.87	.26	.17		.54	.44	.36	.31	–	.56	–.29	–.31	–.30	–.01
4. DR (5)	3.6	2.2	.93	3.5	2.0	.93	.25	.12	.37		.56	.46	.35	–	.41	–.31	–.30	–.30	–.05
5. Negative WOM (3)	5.1	2.0	.88	4.2	2.1	.94	.11	.04	.28	.32		.23	.33	–	.27	–.37	–.39	–.34	.03
6. Vindictive comp. (3)	1.6	1.2	.84	2.4	1.5	.92	.03	.06	.14	.39	.19		.50	–	.19	–.08	–.01	.01	.29
7. Marketplace Aggr. (4)	1.6	.8	–	1.9	.9	–	.08	.07	.18	.14	.24	.37		–	.14	–.20	–.22	–.20	.31
8. Online Comp.—Negative Publicity (4)	6.4	1.3	.91	–	–	–	.08	.06	.20	.22	.31	.14	.08		–	–	–	–	–
9. Failure Severity(3)	6.1	1.3	.89	4.7	1.7	.91	.11	–.05	.30	.07	.23	.01	.06	.15		–.20	–.31	–.27	–.11
10. Interactional fairness (3)	2.5	1.5	.85	3.4	1.8	.91	–.23	.01	–.09	–.06	–.05	–.06	–.06	–.03	–.10		.62	.57	.27
11. Procedural fairness (3)	1.5	1.1	.87	2.7	1.7	.92	–.17	–.07	–.09	–.13	–.09	–.04	–.11	–.09	–.16	.38		.61	.45
12. Distributive fairness (3)	1.5	1.2	.91	2.5	1.7	.97	–.06	.03	–.02	–.09	–.10	.00	–.06	–.08	–.18	.35	.53		.40
13. Customer power (4)	1.8	1.4	.85	3.2	1.6	.88	–.03	–.04	–.01	.04	.02	.16	.24	.01	–.14	.16	.24	.38	

<sup>1</sup> Square root of the average variance extracted.

The correlations of Study 1 (Study 2) are presented in the lower (upper) diagonal triangle. For Study 1 (Study 2), correlations greater than .13 (.20) are significant ( $p < .05$ ; two-tailed distribution). Given space constraints, the control variable age (Study 1: correlations less than .20; Study 2: less than .25), gender (Study 1: less than .15), commitment (Study 1: less than .13; Study 2: less than .20), interaction frequency (Study 1: less than .20; Study 2: less than .22), and perceived alternatives (Study 1: less than .15; Study 2: less than .15) were not included in the matrix because their correlations with the other constructs were small.

Given their different contexts, we observe many mean differences across samples. Study 1 involves episodes that lead to an online complaint, and as a result, its levels of failure severity, greed, anger, blame and negative WOM are higher than in Study 2 ( $p < .001$ ). In addition, Study 1's perceptions of fairness and power are lower, compared to Study 2 ( $p < .001$ ). In turn, Study 2—which involves more face-to-face interactions—has a higher level of vindictive complaining and marketplace aggression ( $p < .05$ ). Interestingly, we find no significant difference for DR ( $p > .71$ ). Although the means may differ between samples, all the key constructs are expected to be linked in a similar manner across studies—that is to say, following the structure presented in Fig. 1b.

Figure 2 PLS models.



in both studies ( $p < .01$ ) and online public complaining for negative publicity in Study 1 ( $p < .05$ )—but not on *direct revenge* behaviors ( $p > .07$ ). In addition, failure severity had direct effects on anger in both studies ( $p < .001$ ), and on greed in Study 2 ( $p < .001$ ). Overall, failure severity appears an important variable that was somewhat overlooked in the customer revenge literature.

*Minimal Effects of Relational and Control Variables* We find minimal effects of the relational variables (i.e., interaction frequency, relationship commitment), perceived alternatives, gender and age in our PLS models. In sum, most of the effects are non-significant, their size is small,

and we do not find any consistent patterns across studies. The variance explained by these variables never exceeds more than 2.6% in Study 1 and 2.5% in Study 2. As a result, we do not use them in the second stage of our analyses.

Covariance-based models: overall fit, subgroup analysis, and common method bias

*Model Specifications* We then tested our model with covariance-based SEMs in order to test the robustness of our PLS findings and perform additional tests that were not

available with PLS (i.e., overall fit, subgroup analysis, and common method bias). In order to follow the guideline of a 5–10 “respondents to estimated parameters” ratio—this guideline was proposed by Bentler and Chou (1987) and later confirmed by Baumgartner and Homburg (1996) in marketing contexts—we had to modify our models in different ways.<sup>9</sup>

First, we *increased* the sample size by combining both samples (for a total sample of 336 respondents). This action was also necessary to perform a subgroup analysis. Second, we took different actions to *decrease* the number of parameters to be estimated. We included *only* the most influential variables found in the PLS models, and used the *construct scores* of our validated scales. This model is illustrated in Fig. 3a. This model also combines the direct behaviors because it results in an improvement in fit ( $\Delta\chi^2 [1]=60.2, p<.001$ ). The indirect revenge behavior is only composed of negative WOM because this response was the only one measured in both studies. By making all these changes, the ratio “respondents-parameters” becomes 9.1, which is within an acceptable range.

*Measurement Invariance and Construct Scores* Because our covariance-based approach focuses only on the structural paths, we took many steps to insure that our measurements were reasonable. First, we ran three additional CFA models<sup>10</sup> in which we tested for two types of measurement invariance—configural and metric—across the two samples (Byrne et al. 1989). After following the procedures of Steenkamp and Baumgartner (1998), we found “configural invariance” as well as “full” or “partial” metric invariance for *all* the latent constructs included in Fig. 3a. Given that our measurements were equivalent across samples, we replicated the same three CFA models for the combined sample of 336 individuals. We derived the factor scores—which account for the loadings of each item—from these CFAs.

*H1 and H2* Overall, a greed-based model (see Fig. 3a) offers satisfactory fit with the data with a CFI of .97, a TLI of .94, a RMSEA of .058, and a  $\chi^2$  of 48.75 ( $df=23, p=.001$ ). This

model replicates in essence the core structure found in the PLS models. No additional links from the established cognitions to DR and anger improve the fit (for any path:  $\Delta\chi^2 [1] \leq 2.8, p \geq .09$ ), which is consistent with H1. Consistent with H2a, the three established cognitions are also linked to greed in a similar manner as in the PLS models.

The ultimate test of the greed-based model is a *comparison* of its overall fit with rival models (MacKenzie 2001). We propose two rival models in which we switch positions between greed and blame (see Fig. 3b), and then between greed and interactional fairness (see Fig. 3c). Based on the literature, these two variables represent the most likely cognitions to replace greed as the most proximal cognition in the revenge process. Consistent with H2b, the greed model is the best fitting model with superior CFI, TLI, RMSEA and  $\chi^2$  (for the same degrees of freedom). These results confirm the soundness of a logic based on greed.

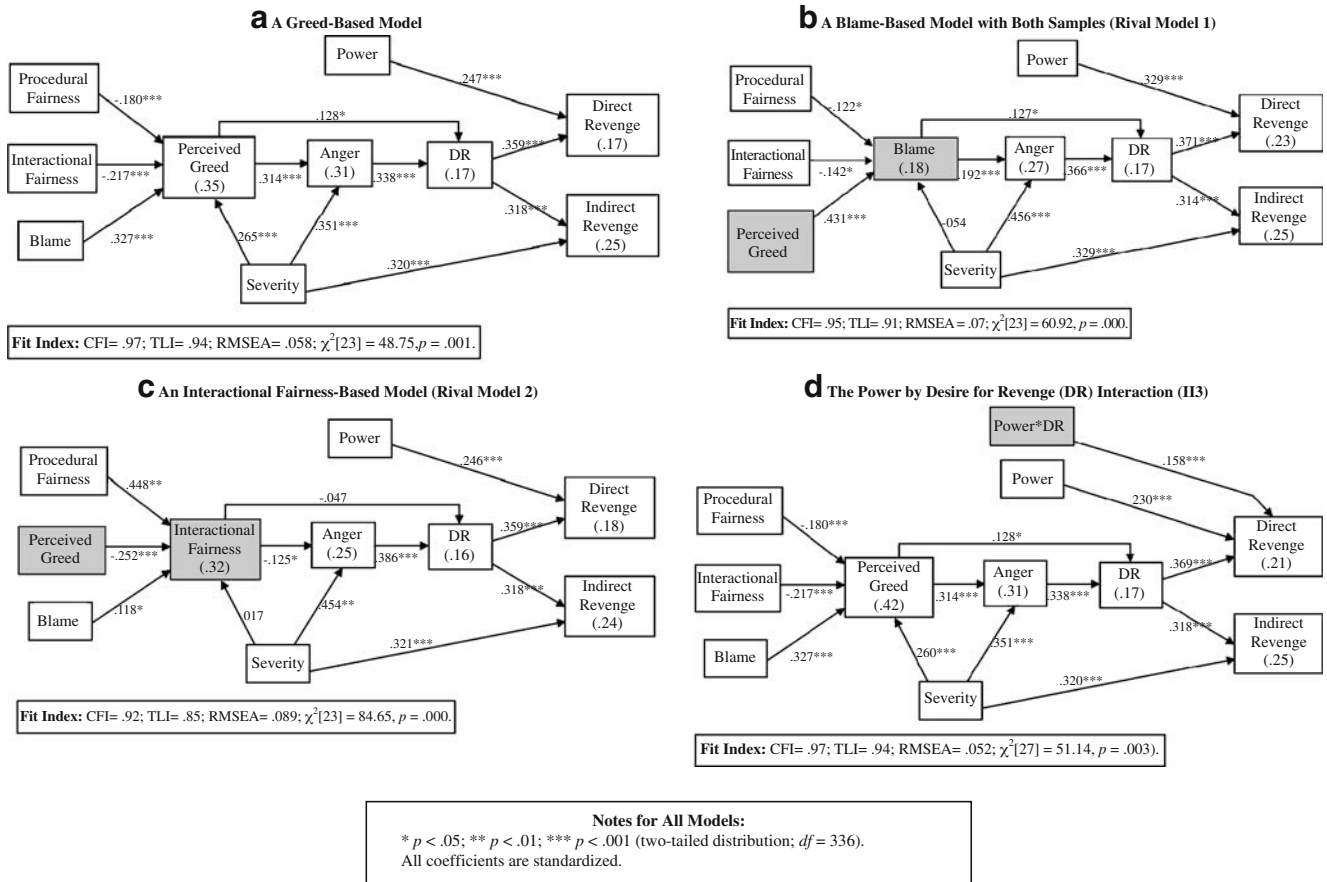
*H3* In Fig. 3d, perceived power is a major antecedent of *direct revenge* ( $p<.001$ ) but not of *indirect revenge* ( $p>.74$ ), which is supportive of H3a. We examine further the role of perceived power by incorporating a power-by-DR interaction term following Ping’s (1995) approach. Consistent with H3b, this interaction term affects *direct revenge* ( $p<.001$ ) but not *indirect revenge* (additional path:  $\beta=.087; p>.08$ ). Importantly, this interaction term stays unchanged across samples ( $\beta_{\text{study } 1}=.166 \approx \beta_{\text{study } 2}=.177; \Delta\chi^2 [1]=1.8, p=.18$ ).

To better understand this interaction pattern, we plotted in Fig. 4 the predicted value of direct revenge behaviors for different levels of power and a DR (i.e., standardized values of “-1” and “1”). The pattern of results supports our contention about the moderating role of power. When high-power customers experience a strong DR, they intensively engage in direct revenge behaviors. However, any other power-DR conditions result in lower levels of direct revenge.

*Subgroup Analysis* To validate the idea of a “unique” model across samples, we performed a subgroup analysis. As explained earlier, we first insured that our measures were invariant across samples. Then, we proceeded with a subgroup analysis of our main model (see Appendix B for detailed results). Overall, the chi-square difference between the “subgroup” vs. “combined” models (Fig. 3a) is not significant ( $\Delta\chi^2=13.30, df=23, p=.94$ ). This result gives us confidence that a unique model, taken as a whole, fits the data appropriately in both contexts. This overall assessment is followed by a series of “path analyses,” in which we constrained all the paths of the model, one by one, to equality between samples. These comparative tests also support the conclusion that these models are consistent across samples. Tests of  $\chi^2$  comparison reveal that the majority of the paths are equal across subgroups (all  $\Delta\chi^2$

<sup>9</sup> PLS is less sensitive to sample size and has greater statistical power (Reinartz et al. 2009). As a result, it could estimate our large models that included 159 parameters (Fig. 2a) and 149 parameters (Fig. 2b). Given the guideline suggested by Bentler and Chou (1987), these numbers of parameters were too high for a covariance-based approach, given our sample size. Accordingly, we had to simplify our models to focus only on the structural paths. Although this approach has limitations, it has also been regularly used for similar reasons (see McQuitty 2004).

<sup>10</sup> The details of these CFA models are available by contacting the first author. Most of these results were consistent with the psychometric tests already presented in the measurement sections and for our PLS models (Appendix A).



**Figure 3** Covariance-based models.

[1] ≤ 3.2;  $p \geq .07$ ). The only exception<sup>11</sup> is the path “failure severity → perceived greed” that is weaker in Study 1 than in Study 2 ( $\Delta\chi^2 [1]=4.8; p=.03$ ).

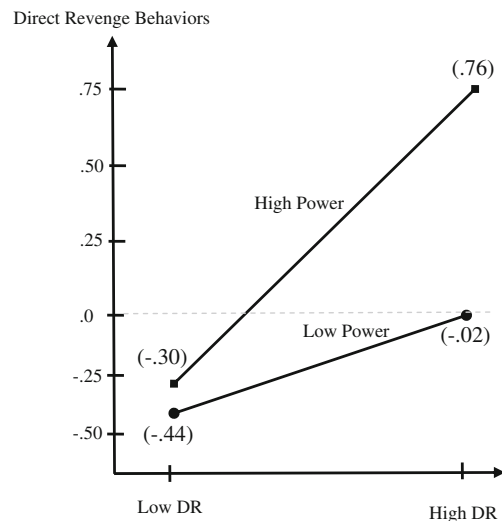
**Common Method Bias** We assessed the potential effect of common method bias by incorporating a common method first-order construct (Podsakoff et al. 2003) that was reflected in all the indicators of the greed-based model (i.e., Fig. 3a). Overall, this model fits the data acceptably with a  $\chi^2 [12]=25.83 (p=.011)$ , a CFI of .98, a TLI of .94 and a RMSEA of .059. Importantly, all the paths remained significant and of similar amplitude. These models provide confidence that the significant paths are not caused by systematic error inherent to our method.

**Discussion**

Our extended model of customer revenge is supported in two different studies, and with two analytical approaches. After building an extant model, we predicted and found

<sup>11</sup> The path “procedural fairness → greed” was not found to be different across samples ( $\Delta\chi^2 [1]=2.60; p=.11$ ).

three new effects. First, perceived greed is the stronger predictor of anger and a DR, and this cognition is increased by judgments of unfairness, blame, and failure severity. Second, different kinds of revenge behaviors—direct vs. indirect—have different antecedents. Third, we found that



**Figure 4** Interaction between desire for revenge and power in predicting direct revenge behaviors.

customer power increases the level of revenge behaviors, but only for the direct kind. We elaborate on these findings in the next sections.

#### Perception of a firm's greediness

As theorized, a reason why judgments of unfairness and blame increase anger is because customers perceive that the firm was greedy—i.e., the firm acted opportunistically, caring more about their profits than fairly rectifying the service problem. Such uncaring treatment clearly angers the customers and triggers their DR—more so than any other cognition. Customers who perceive greediness in firms get “morally” outraged and then become strongly motivated to punish these firms (Bies and Tripp 2009). We argue that the moral basis of this negative motive creates an implacable force to punish the offending firm in a similar way to the logic observed in a legal setting.

Note that we found effects for a procedural and interactional lack of fairness, but not for the distributive component. This may mean that customers are not reacting so much to not getting the outcome they wanted, but are more outraged by the symbolism of how they are treated during the recovery process. Customers expect that firms have moral obligations to consider customers' welfare through the recovery process. When customers perceive an intentional violation of these obligations, customers easily infer that the firm acted greedily.

The severity of the failure also increases perceived greed and anger. Though we did not predict this effect, it is consistent with our explanation. That is, the greater the inconvenience of going through the recovery process, both (1) the more angry customers become, and, (2) the more convinced customers are that firms are merely trying to exploit them. In general, the greater the magnitude of harm, the more the firm must have intended some harm to happen, or so customers believe. Of course, all these judgments are predicated on believing the firm is at fault and responsible, which explains why blame attribution is also related to perceived greed. Here, it should be noted that the effect of severity on greed was stronger in Study 2 than in Study 1. This result may be explained by a possible “ceiling effect” in Study 1 for which the severity of the failure was higher ( $M_{\text{study 1}}=6.1 > M_{\text{study 2}}=4.7$ ;  $p < .01$ ).

We did not find important effects of relational variables on perceived greed, which somewhat contrasts with prior revenge research (Grégoire and Fisher 2008). We offer two reasons for this absence of effects. First, greed is qualitatively different from other cognitions presented in this literature. In contrast to “self-identity damage” that is mainly experienced by customers who have strong prior affiliations with firms (Bechwati and Morrin 2007), greed can be perceived by any customers, regardless of their prior

relationship. Second, greed *follows* the established cognitions in our extended model, and as such, it is more “advanced” in the sense-making of a poor recovery. Given this position, greed may be less susceptible to be influenced by a prior relationship.

#### Direct vs. indirect revenge behaviors

Our categorization of revenge behaviors—direct vs. indirect—is important for two reasons. First, these acts produce different consequences for firms. Specifically, direct revenge puts intense pressure on the frontline employees, and it can generate important costs for firms such as absenteeism and turnover (e.g., Harris and Reynolds 2003). However, because of these direct acts' overt nature, managers can easily identify these customers and take immediate measures to reduce this form of revenge. In contrast, indirect revenge damages a firm's reputation but has a less negative repercussion on the frontline employees. Yet, because it occurs outside the firm, it is very difficult to control and manage, especially in an online context.

Second, these acts are predicted by somewhat different antecedents. While a DR predicts both direct and indirect behaviors, failure severity has a direct path only to indirect revenge, and customer power affects only direct revenge (through main and moderation effects). Thus, if a firm wishes to decrease a given form of revenge, then a different set of recommendations emerges. We elaborate on each of these points in the next sections.

#### Customer power

Why are powerless customers reluctant to engage in direct revenge, compared to powerful customers? We suggest this effect of power rests on the customer consideration of whether the firm will counter-retaliate (e.g., provide worse service in the future, refuse to serve the customer). The likelihood of the firm counter-retaliating is based on whether the firm: (1) is able to target the avenging customers and (2) dares risking counter-retaliation.

First, because direct revenge is overt and visible, a firm is able to identify and target the avenging customer. However, indirect revenge is covert, and so the firm is much less able to target a specific customer for counter-retaliation. Because of this difficulty at targeting, any customers, regardless of their power, may engage in indirect revenge. Second, supposing the firm can identify and target the avenging customer, the firm still may not risk doing so—not if the customer is powerful. For instance, if the individual is a “big” customer who needs the firm much less than the firm needs him, the firm may ignore the customer's revenge acts rather than risk driving off the customer's patronage with punishment. Our results show that when customers perceive such a dependency



imbalance, they believe they are more powerful than the firm is, and thus perhaps also believe that the firm will ignore their vengeful antics.

### Managerial implications

We recommend three basic tactics to reduce a DR or revenge acts, which imply acting on the key components of our model, namely greed, failure severity, and customer power.

**Greed** To reduce perceived greed, managers should devise recovery procedures that do not appear exploitative of customers. While managers cannot give in to unreasonable complaints, their efforts to be too cost conscious during the recovery process may be viewed as a sign of greediness. Firms have to find a right balance between controlling their costs and communicating their concerns for customers' problems. Although this advice seems intuitive, its essence has been violated in many efforts of cost rationalization, for instance, when firms are forcing customer inquiries through hastily answered emails or automatic systems, or when firms are limiting the access to a live service representative. To communicate a good intention and an absence of greed, procedures should include a failsafe process that ensures that concerns are fairly addressed. Importantly, firms' policies should be transparent and justified on grounds other than cost-saving or income-generation.

**Failure Severity** To further reduce anger and indirect revenge, firms should carefully "triage" the service failures based on the severity levels. This recommendation is inspired by the emergency healthcare system, which makes a priority of addressing the most severe cases first. If a firm cannot resolve every service failure, it should identify and resolve, at least somewhat, the most severe cases. Severe failures probably involve a high level of rumination (McCullough et al. 2001), which is at the origin of increased greed, anger and indirect revenge.

**Power** Power is the force behind acts of direct revenge, including insulting and physically abusing frontline employees. To avoid such behaviors, firms have to insure they are not at a disadvantage in their power relationship with customers. To ensure an even power balance, firms should try to reduce their dependencies on "big" customers. At least, no customer should perceive that his or her patronage is indispensable. Keeping a varied portfolio of customers and reducing a firm's dependency are natural means to prevent cases of power abuse.

Because fear of counter-retaliation may explain the effect of customer power, managers could stoke this fear, when it is appropriate to do so. Managers should increase customers' perception that the firm *could* counter-retaliate against overly

aggressive customers. Indeed, it may be worth it to "fire" some of these customers, even if they were highly profitable in the past. For the most aggressive direct revenge acts, such as those that involve destruction of a firm's property, firms could even sue for damages. A few publicized lawsuits against aggressive customers could deter and send a message to other "would-be" abusive customers.

### Limitations and future research

In this research, we present an integrative model that positions greed and customer power within an extant customer revenge model. We believe that such comprehensive models are important at this point given the fragmented nature of the literature on customer revenge. However, this approach also has limitations—in terms of causality, internal validity, and common method bias—that need to be discussed. To address them, we strongly encourage extensions with experimental (e.g., Bechwati and Morrin 2007) and longitudinal (e.g., Grégoire et al. 2009) designs.

Also, retrospective-based field studies involve memory bias that may affect the accuracy of customers' recall (e.g., Smith et al. 1999). Although this bias cannot be completely eliminated, we survey only customers who *recently* experienced a failed recovery or complained to an online agency. The delays involved in our research are much shorter than the six-month guideline previously used (e.g., Tax et al. 1998).

Studies 1 and 2 also are different from each other, and both possess strengths and weaknesses that complement each other. For instance, the issue of causality is more problematic in Study 1 because all its constructs are measured at the same time. Here, the multi-stage design of Study 2 presents a procedural remedy to this limitation. In turn, Study 2 presents its own limitations, such as its convenience-based sample and risk of "demand effects." Again, Study 1 presents a remedy for this limitation: its participants were drawn from a representative sample of "real" online complainers. In sum, the replication of our models across methods (i.e., cross-sectional vs. multi-stage), samples (i.e., convenience vs. representative) and analytical approaches (i.e., two SEMs) should provide reasonable confidence in our results.

Our covariance-based models presented in Fig. 3 also possess limitations because they do not simultaneously estimate the measurement errors of our scales. We had to make this decision given the large number of parameters to be estimated in a "complete" model and the smallness of our sample (see Bentler and Chou 1987). However, we tried to mitigate this limitation by extensively testing the psychometric properties of our scales and presenting "complete" PLS models. It should be noted that simplified covariance-based models have been regularly published in marketing (see McQuitty 2004).

Beyond these methodological issues, there are many exciting research avenues that deserve future attention. First, we still need to understand and incorporate key constructs—such as personality traits, switching costs, self-efficacy and fear of counter-retaliation—that could have an important effect on this process. Here, we acknowledge recent efforts that have incorporated the “helplessness” emotion (Gelbrich *in press*) and the conflict management literature (Beverland et al. *in press*) into the customer revenge literature. Second, we suggest to go beyond the firm as the unique offending party, and to examine the frontline employees. Customers can infer different motives for the employees—pure malice rather than greed—and use different forms of revenge against them. Third, future research should pay more attention to online complaining, a response for which Study 1 only explains a small portion of variance. Finally, researchers should study the differences and similarities between apparently related concepts—such as customer revenge and dysfunctional customer behavior (Harris and Reynolds 2003; Reynolds and Harris 2009)—that have emerged from different literatures.

**Appendix A: Measures and Loadings (PLS Models)**

Item	Study 1	Study 2
Blame attribution (Study 1: $\alpha=.86$ ; $AVE^1=.68$ ) (Study 2: $\alpha=.89$ ; $AVE=.72$ )		
Overall, the firm was “not at all” (1) vs. “totally” (7) responsible for the poor recovery.	.65	.76
The service failure episode was in “no way” (1) vs. “completely” (7) the firm’s fault.	.92	.87
To what extent do you blame the firm for what happened? Not at all (1) – completely (7).	.89	.91
A firm’s greed (Study 1: $\alpha=.90$ ; $AVE=.70$ ) (Study 2: $\alpha=.92$ ; $AVE=.74$ )		
The firm did not intend to take advantage of me – ... intended to take advantage of me (7).	.89	.91
The firm was primarily motivated by my interest (1) – ...its own interest (7).	.87	.89
The firm did not try to abuse me (1) – ...tried to abuse me (7).	.67	.84
The firm had good intentions (1) – ...had bad intentions (7).	.89	.79
Anger (Study 1: $\alpha=.92$ ; $AVE=.74$ ) (Study 2: $\alpha=.92$ ; $AVE=.75$ )		
-I felt 1) outraged, 2) resentful, 3) indignation, and 4) angry.	.85–.93	.81–.90
Desire for revenge (Study 1: $\alpha=.97$ ; $AVE=.87$ ) (Study 2: $\alpha=.97$ ; $AVE=.86$ )		
-Indicate to which extent you wanted to:		
... take actions to get the firm in trouble.	.92	.89
... punish the firm in some way.	.94	.95

... cause inconvenience to the firm.	.94	.94
... get even with the service firm.	.93	.93
... make the service firm get what it deserved.	.93	.92
Perceived customer power (Study 1: $\alpha=.91$ ; $AVE=.73$ ) (Study 2: $\alpha=.94$ ; $AVE=.78$ )		
Thinking of the way you felt through the recovery episode, indicate your agreement with the following statement:		
Through this service recovery, I had leverage over the service firm.	.72	.77
I had the ability to influence the decisions made by the firm.	.90	.90
The stronger my conviction, the more I was able to get my way with the firm.	.91	.94
Because I had a strong conviction of being right, I was able to convince the firm.	.87	.92
Marketplace aggression (Formative constructs)		
I have damaged property belonging to the service firm.	–	–
I have deliberately bent or broken the policies of the firm.	–	–
I have showed signs of impatience and frustration to someone from the firm.	–	–
I have hit something or slammed a door in front of (an) employee(s).	–	–
Relationship commitment (Study 1: $\alpha=.94$ ; $AVE=.83$ ) (Study 2: $\alpha=.90$ ; $AVE=.76$ )		
I was very committed to my relationship with the firm.	.91	.91
The relationship was something I intended to maintain for a long time.	.93	.92
I put the efforts into maintaining this relationship for a long time.	.89	.77
Negative WOM (Study 1: $\alpha=.91$ ; $AVE=.77$ ) (Study 2: $\alpha=.96$ ; $AVE=.88$ )		
I spread negative word-of-mouth about the company or service firm.	.94	.92
I denigrated the service firm to my friends.	.93	.96
When my friends were looking for a similar service, I told them not to buy from the firm.	.75	.93
Vindictive complaining (Study 1: $\alpha=.88$ ; $AVE=.71$ ) (Study 2: $\alpha=.96$ ; $AVE=.85$ )		
-I complained to the firm to...		
... give a hard time to the representatives.	.89	.95
... be unpleasant with the representatives of the company.	.93	.94
... make someone from the organization pay for their services.	.88	.92
Online complaining for negative publicity (Study 1: $\alpha=.95$ ; $AVE=.82$ )		
-complained to consumeraffairs.com...	–	–
... to make public the behaviors and practices of the firm.	.93	–
... to report my experience to other consumers.	.86	–
... to spread the word about my misadventure.	.91	–

Interactional fairness (Study 1:  $\alpha=.91$ ; AVE=.73) (Study 2:  $\alpha=.95$ ; AVE=.83)

The employee(s) who interacted with me ...		
... treated me in a polite manner.	.86	.93
... gave me detailed explanations and relevant advice.	.77	.84
... treated me with respect.	.92	.95
... treated me with empathy.	.86	.92

Distributive fairness (Study 1:  $\alpha=.93$ ; AVE=.83) (Study 2:  $\alpha=.98$ ; AVE=.94)

Overall, the outcomes I received from the service firm were fair.	.95	.97
Given the time, money and hassle, I got fair outcomes.	.94	.98
I got what I deserved.	.84	.95

Procedural fairness (Study 1:  $\alpha=.93$ ; AVE=.76) (Study 2:  $\alpha=.96$ ; AVE=.85)

Despite the hassle caused by the problem, the firm responded fairly and quickly.	.89	.95
I feel the firm responded in a timely fashion to the problem.	.81	.93
I believe the firm has fair policies and practices to handle problems.	.87	.86
With respect to its policies and procedures, the firm handled the problem in a fair manner.	.90	.95

Failure severity (Study 1:  $\alpha=.92$ ; AVE=.79) (Study 2:  $\alpha=.93$ ; AVE=.82)

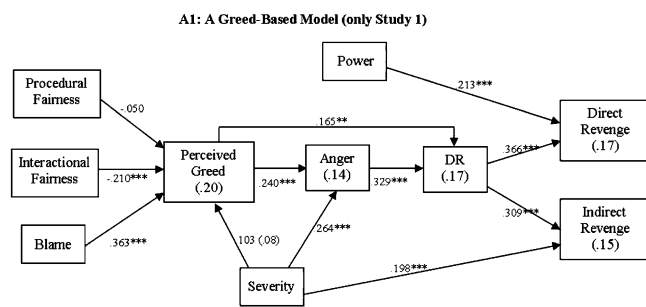
The poor recovery caused me...		
... minor problems (1). — ... major problems (7).	.88	.90
... small inconveniences (1). — ... big inconveniences (7).	.92	.94
... minor aggravation (1). — ... major aggravation (7).	.86	.88

Perceived alternatives (Study 1:  $\alpha=.86$ ; AVE=.75) (Study 2:  $\alpha=.88$ ; AVE=.79)

There were many alternatives for this product and service.	.90	.95
I could take my business elsewhere.	.83	.90

<sup>1</sup> Average variance extracted.

### Appendix B: Subgroup Analysis with Covariance-Based SEM



Fit Index: CFI = .97 TL1 = .95; RMSEA = .032;  $\chi^2 [46] = 62.05, p = .057$ .  
 Note 1: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed distribution;  $df = 336$ ).  
 Note 2: All coefficients are standardized.

### References

Aquino, K., Tripp, T. M., & Bies, R. J. (2001). How employees respond to personal offense: the effects of blame attribution, victim status, and offender status on revenge in the workplace. *Journal of Applied Psychology, 86*, 52–59.

Aquino, K., Tripp, T. M., & Bies, R. J. (2006). Getting even or moving on? Power, procedural justice, and types of offense as predictors of revenge, forgiveness, reconciliation, and avoidance in organizations. *Journal of Applied Psychology, 91*, 653–658.

Bandura, A. (1977). Self efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.

Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: a review. *International Journal of Research in Marketing, 13*, 139–161.

Bechwati, N. N., & Morrin, M. (2003). Outraged consumers: getting even at the expense of getting a good deal. *Journal of Consumer Psychology, 13*, 440–453.

Bechwati, N. N., & Morrin, M. (2007). Understanding voter vengeance. *Journal of Consumer Psychology, 17*, 277–291.

Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research, 16*, 78–117.

Beverland, M. B., Kates S.M., Lindgreen A. & Chung E. (in press). Exploring consumer conflict management in service encounters. *Journal of the Academy of Marketing Science*.

Bies, R. J., & Tripp, T. M. (1996). Beyond distrust: ‘Getting even’ and the need for revenge. In R. M. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 246–260). Thousand Oaks: Sage.

Bies, R. J., & Tripp, T. M. (2009). *Righteous Anger: ‘Mad as Hell’ at ‘Greed is Good.’* Retrieved April 8, 2009 from [www.ChangeThis.com](http://www.ChangeThis.com).

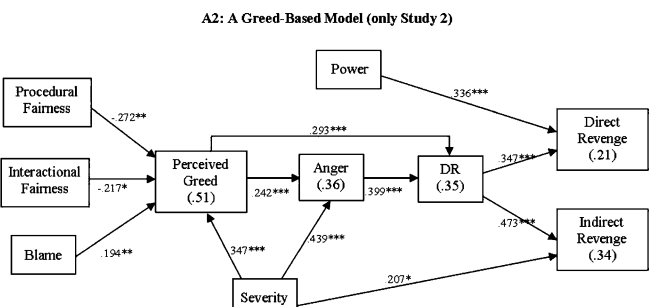
Bitner, M., Booms, B. H., & Tetreault, M. S. (1990). The service encounter: diagnosing favorable/unfavorable incidents. *Journal of Marketing, 54*, 71–84.

Bollen, K. A., & Lennox, R. (1991). Conventional wisdom on measurement: a structural equation perspective. *Psychological Bulletin, 110*, 305–14.

Bolton, R. N., & Lemon, K. N. (1999). A Dynamic model of customers’ usage of services: usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research, 36*, 171–186.

Bonifield, C., & Cole, C. (2007). Affective responses to service failure: anger, regret, and retaliatory and conciliatory responses. *Marketing Letters, 18*, 85–99.

Bougie, R., Pieters, R., & Zeelenberg, M. (2003). Angry customers don’t come back, they get back: the experience and behavioral implications of anger and dissatisfaction. *Journal of the Academy of Marketing Science, 31*, 377–393.



- Byrne, B., Shavelson, R. J., & Muthen, B. (1989). Testing for the equivalence of factor covariance and mean structures: the issue of partial measurement invariance. *Psychological Bulletin*, *105*, 456–466.
- Campbell, M. C. (1999). Perceptions of price unfairness: antecedents and consequences. *Journal of Marketing Research*, *36*, 187–199.
- Chebat, J. C., & Slusarcsyk, W. (2005). How emotions mediate the effects of perceived justice on loyalty in service recovery situations: an empirical study. *Journal of Business Research*, *12*, 664–673.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295–336). Mahwah: Lawrence Erlbaum Associates.
- Cronin, J. J., Brady, M. K., & Hult, G. T. (2000). Assessing the effect of quality, value, and customer satisfaction on consumer behavioral intentions in service environment. *Journal of Retailing*, *76*, 193–218.
- Crossley, C. D. (2009). Emotional and behavioral reactions to social undermining: a closer look at perceived offender motives. *Organizational Behavior and Human Decision Processes*, *108*, 14–24.
- Dahl, R. A. (1957). The concept of power. *Behavioral Science*, *2*, 201–215.
- De Wulf, K., Odekerken-Schroder, G., & Iacobucci, D. (2001). Investments in consumer relationships: a cross-country and cross-industry exploration. *Journal of Marketing*, *65*, 33–50.
- Douglas, S. C., & Martinko, M. J. (2001). Exploring the role of individual differences in the prediction of workplace aggression. *Journal of Applied Psychology*, *86*, 547–560.
- Folkes, V. S. (1984). Consumer reactions to product failures: an attributional approach. *Journal of Consumer Research*, *10*, 398–409.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equations models: Lisrel and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, *19*, 440–452.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*, 39–50.
- Frazier, G. L. (1999). Organizing and managing channels of distribution. *Journal of the Academy of Marketing Science*, *27*, 226–240.
- French, J., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in Social Power*. Ann Arbor: Institute for Social Research.
- Gelbrich, K. (in press). Anger, frustration, and helplessness after service failure: coping strategies and effective informational support. *Journal of the Academy of Marketing Science*.
- Grégoire, Y., & Fisher, R. J. (2006). The effects of relationship quality on customer retaliation. *Marketing Letters*, *17*, 31–46.
- Grégoire, Y., & Fisher, R. J. (2008). Customer betrayal and retaliation: when your best customers become your worst enemies. *Journal of the Academy of Marketing Science*, *36*, 247–261.
- Grégoire, Y., Tripp, T., & Legoux, R. (2009). When customer love turns into lasting hate: the effects of relationship strength and time on customer revenge and avoidance. *Journal of Marketing*, *73*, 18–32.
- Harris, L., & Reynolds, K. L. (2003). The consequences of dysfunctional customer behavior. *Journal of Service Research*, *6*, 144–161.
- Huefner, J. C., & Hunt, H. K. (2000). Consumer retaliation as a response to dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, *13*, 61–82.
- Hulland, J. S. (1999). Use of partial least square in strategic management research: a review of four recent studies. *Strategic Management Journal*, *20*, 194–204.
- Mackenzie, S. B. (2001). Opportunities for improving consumer research through latent variable structural equation modeling. *Journal of Consumer Research*, *28*, 159–166.
- Maxham, J. G., III, & Netemeyer, R. G. (2002a). Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent. *Journal of Retailing*, *78*, 239–252.
- Maxham, J. G., III, & Netemeyer, R. G. (2002b). A longitudinal study of complaining customers' evaluation of multiple service failures and recovery efforts. *Journal of Marketing*, *66*, 57–71.
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: relationships with forgiveness, rumination, well-being, and the big five. *Personality and Social Psychology Bulletin*, *27*, 601–610.
- McGovern, G., & Moon, Y. (2007). Companies and the customers who hate them. *Harvard Business Review*, *85*, 78–84.
- McQuitty, S. (2004). Statistical power and structural equation models in business research. *Journal of Business Research*, *57*, 175–183.
- Menon, K., & Bansal, H. (2006). Exploring consumer experience of social power during service consumption. *International Journal of Service Industry Management*, *18*, 89–104.
- Ping, R. A. (1995). A parsimonious estimating technique for interaction and quadratic latent variables. *Journal of Marketing Research*, *32*, 336–347.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903.
- Povinelli, D. J. (2001). On the possibilities of detecting intentions prior to understanding them. In B. Malle, D. Baldwin, & L. Moses (Eds.), *Intentionality: A Key to Human Understanding* (pp. 225–248). Cambridge: MIT Press.
- Reeder, G. D., Kumar, S., Hesson-McInnis, M. S., & Trafimow, D. (2002). Inferences about the morality of an aggressor: the role of perceived motive. *Journal of Personality and Social Psychology*, *83*, 789–803.
- Reeder, G. D., Pryor, M., Wohl, J. A., & Griswell, M. L. (2005). On attributing negative motives to others who disagree with our opinions. *Personality and Social Psychology Bulletin*, *31*, 1498–1510.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, *26*, 332–344.
- Reynolds, K. L., & Harris, L. C. (2009). Dysfunctional customer behavior severity: an empirical examination. *Journal of Retailing*, *85*, 321–335.
- Ringberg, T., Odekerken-Schroder, G., & Christensen, G. L. (2007). A cultural models approach to service recovery. *Journal of Marketing*, *71*, 194–214.
- Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: further exploration of a prototype approach. *Journal of Personality and Social Psychology*, *52*, 1061–1086.
- Singh, J. (1988). Consumer complaint intentions and behavior: definitional and taxonomical issues. *Journal of Marketing*, *52*, 93–107.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, *66*, 15–37.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, *36*, 356–372.
- Steenkamp, J. B., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, *25*, 78–90.

- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: implications for relationship marketing. *Journal of Marketing*, *62*, 60–76.
- Tripp, T. M., Bies, R. J., & Aquino, K. (2007). A vigilante model of justice: revenge, reconciliation, forgiveness, and avoidance. *Social Justice Research*, *19*, 10–34.
- Tucker, N. (2007). Taking a whack against comcast; Mona shaw reached her breaking point, then for her hammer. *The Washington Post*, *October 18*, p. C1.
- Wade, S. H. (1989). The development of a scale to measure forgiveness. Unpublished Doctoral Dissertation, Fuller Theological Seminary, Pasadena, California.
- Ward, J. C., & Ostrom, A. L. (2006). Complaining to the masses: the role of protest framing in customer-created complaint web sites. *Journal of Consumer Research*, *33*, 220–230.
- Weiner, B. (2000). Attributional thoughts about consumer behavior. *Journal of Consumer Research*, *27*, 382–387.
- Wetzer, I. M., Zeelenberg, M., & Pieters, R. (2007). Never eat in that restaurant, I did! Exploring why people engage in negative word-of-mouth communication. *Psychology & Marketing*, *24*, 661–680.
- White, J. C., Varadarajan, P. R., & Dacin, P. A. (2003). Market situation interpretation and response: the role of cognitive style, organizational culture, and information use. *Journal of Marketing*, *67*, 63–79.
- Wooten, D. B. (2009). Say the right thing: apologies, reputability, and punishment. *Journal of Consumer Psychology*, *19*, 225–235.
- Zourrig, H., Chebat, J.-C., & Toffolic, R. (2009). Consumer revenge behavior: a cross-cultural perspective. *Journal of Business Research*, *62*, 995–1001.