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Antonetti, P, Crisafulli, B and Katsikeas, CS orcid.org/0000-0002-8748-6829 (2020) Does it really hurt? Making sense of varieties of anger. *Psychology and Marketing*, 37 (11). pp. 1465-1483. ISSN 0742-6046

<https://doi.org/10.1002/mar.21392>

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Does it really hurt? Making sense of varieties of anger

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Does it really hurt? Making sense of varieties of anger

ABSTRACT

While research has shown that consumer anger causes a range of negative consequences, the conceptualization and measurement of this emotion remain inconsistent. Some studies link anger to consumer revenge motivated by a desire to hurt the company, while others associate anger with a desire to cooperate with the company. This inconsistency is caused by the fact that anger is a broad label used to refer to almost any brand failure. We argue that, rather than considering anger as a single construct, scholars should distinguish between a supportive facet of anger, which comprises feelings of annoyance, frustration and other mild negative feelings, and a vindictive facet of anger, which comprises feelings of intense anger, rage and outrage. These two facets of anger reconcile divergent arguments presented in past research. Research benefits from moving beyond the generic label of anger to consider supportive and vindictive facets of anger that influence consumers' reactions under different circumstances. Only vindictive anger prompts consumers to take revenge and punish the company for unfair treatment. Supportive anger triggers instead a desire to solve the problem by cooperating with the company. This study presents important managerial implications for assessing and managing feelings of anger following brand failures.

Keywords: supportive anger, vindictive anger, problem-solving complaining, vindictive complaining, anger, frustration, rage.

Introduction

Anger is a negative emotion caused by the appraisal of negative or unwanted circumstances that are caused by others (Antonetti, 2016; Bagozzi, Gopinath, & Nyer, 1999). Past research shows how the experience of this emotion is different from, and yet closely related to, other negative feelings such as frustration, rage, disgust, contempt and fear (e.g., Antonetti, 2016; Gelbrich, 2010; Harmeling, Magnusson & Singh, 2015; Romani, Grappi, & Bagozzi, 2013; Wetzer et al., 2007). For marketers, anger is a particularly important emotion because it plays a key role in fostering negative word of mouth (e.g., Grégoire, Laufer, & Tripp, 2010; Wetzer, Zeelenberg, & Pieters, 2007), complaining (e.g., Gelbrich, 2010), boycotting (e.g., Friedman, 1985), and/or participation in other forms of protest both offline and online (e.g., Ward & Ostrom, 2006). Despite this evidence, there is also significant disagreement in the literature on the consequences of anger. Some conceive anger as a negative emotion that induces revenge against the company (e.g., Grégoire et al., 2010; Joireman, Grégoire, Devezer, & Tripp, 2013). A contrasting view depicts anger less negatively, associating this emotion with a desire to solve the problem through cooperation with the company (e.g., Kalamas, Laroche, & Makdessian, 2008; Koppitsch, Folkes, MacInnis, & Porath, 2013; Romani, Grappi, & Bagozzi, 2013).

This evidence is surprising, because the idea that one emotion can lead to different types of behaviors stands in contrast with theories of emotions that postulate that discrete emotions lead to specific unique behavioral tendencies (e.g., Bagozzi et al., 1999; Ekman, 1992; Fridja, 1987; Roseman, 1991). Extant research lacks a conceptualization of anger that accounts for this observed variability of outcomes and that reconciles such variability with prior research assigning just one behavioral tendency to anger (e.g., Fischer & Roseman 2007; Romani et al., 2013).

To address this inconsistency, we build on hierarchical theories of emotions (e.g., Johnson-Laird & Oatley, 1989; Laros & Steenkamp, 2005; Shaver, Schwartz, Kirson, & O'Connor, 1987; Storm & Storm, 1987). We argue that, to be able to reconcile results from past research, we need to go beyond anger as a basic emotion and consider its different facets. Consumers use the label *anger* very flexibly when referring to situations that vary greatly in terms of the arousal and motivation activated (Russell & Fehr, 1994). This is because, as demonstrated by research on the language used to identify emotions, anger is one of the fundamental “emotion prototypes” (Shaver et al., 1987) or “emotional modes” (Johnson-Laird & Oatley, 1989), which can manifest itself in several more specific forms. In this study, we uncover two specific facets of the basic emotion of anger, namely, supportive and vindictive anger.

We define supportive anger as a mild form of anger that focuses consumers' attention on the need to find a resolution to the problem experienced. Supportive anger includes feelings of mild anger, annoyance and frustration. Vindictive anger is defined instead as a stronger, high arousal form of anger that focuses consumers' attention on the motivation to seek revenge against the company for its wrongdoing. Vindictive anger includes feelings of intense anger, rage and outrage. Our approach is consistent with conceptual work by Antonetti (2016), which pursues the distinction between a problem-focused and a vengeful type of anger. We develop further this notion by developing and empirically testing reliable scales that measure the two facets of consumer anger.

We make three contributions to existing debates. First, we contribute to the literature on negative emotions (Romani, Grappi, & Dalli, 2012) by demonstrating that the general label of anger is too ambiguous and that scholars can improve its conceptualization by focusing on specific facets of anger. Second, the study contributes to research on the measurement of anger (Laros &

Steenkamp, 2005; Richins, 1997; Romani et al., 2012) by advocating the importance of moving beyond a global measure of anger and toward the measurement of different facets of anger. In this respect, some of the items commonly used to measure anger (e.g., angry, mad, outrage) are not effective at discriminating between the two facets of anger. This means that, if only such items are employed to measure anger, it will be impossible to ascertain the specific reaction being captured. To overcome this problem, our study proposes and validates two sets of items that capture the two different facets of anger. Finally, this study contributes to the literature on the relationship between anger and frustration. Specifically, past research has argued that frustration is a discrete emotion, which is different from anger. Frustration would capture a negative emotion caused by aversive environmental circumstances leading to failed goal attainment, for which the company is not to blame (Gelbrich, 2010; Roseman, 1991; Wetzer et al., 2007). Anger would result instead from a negative event for which the company is responsible (Gelbrich, 2010; Wetzer et al., 2007). This study shows that, consistent with seminal work in social psychology (Shaver et al., 1987), the array of feelings associated with anger is very broad and encompasses experiences ranging from annoyance and frustration to intense anger and rage.

Conceptual development

Pertinent literature

Anger has been a popular variable in marketing research (Antonetti, 2016; Lastner, Fennell, Folse, Rice, & Porter III, 2019; Xie & Bagozzi, 2019). Consumer research has examined anger to explain consumer revenge following brand failures (Grégoire et al., 2010; Joireman et al., 2013; Joireman, Grégoire, & Tripp, 2016). In this stream of literature, anger is mainly conceptualized as vindictive in nature and used as a mediator that explains how consumers' perceptions of the failure

influences the decision to punish the company. Table 1 provides a summary of exemplary work in this line of enquiry.

INSERT TABLE 1 HERE

However, there are also studies conceptualizing anger differently. Sometimes angry consumers only want to find a solution to the problem (Fischer & Roseman, 2007). In a qualitative investigation, for example, Beverland and colleagues (2010) show that consumers apply one of two frames to conflict situations: a task or a personal frame. While both frames can cause anger, consumers who apply a task frame are more likely to accept the situation peacefully and to focus on finding a solution. As the authors note (Beverland, Kates, Lindgreen, & Chung, 2010, p. 620), *“When a service failure was framed in terms of task conflict informants focused ‘on the material aspects of the dispute’ (Pinkley and Northcraft 1994, p. 194) and adopted conflict styles conducive to gaining practical outcomes such as restoration of services, acknowledgement of mistakes, financial or other compensation, and relationship repair. Although such failures often made informants angry, these episodes were typically recounted in a calm rational manner and explained in terms of one off failures, bad days, occasional mistakes, or lapses in normal standards.”* Anger is, therefore, not always damaging to companies (Kalamas et al., 2008). Rather, anger can even prove beneficial because it offers an opportunity to learn from mistakes without threatening consumer-company relationships (Fischer & Roseman, 2007; Romani et al., 2013).

Anger and its siblings: The relationships with frustration and rage

Despite being the focus of scholarly debates (Berkowitz, 1993; Kuppens et al., 2007; Roseman, 1991), the differences between frustration and anger have been difficult to identify. In a marketing context, Gelbrich (2010) suggests that consumers feel frustrated when they blame the negative

outcome on external factors (not the company). Frustration is believed to be outcome focused, thus highly linked to failed goal attainment (Wetzer et al., 2007). On the other hand, consumers feel angry when a negative event is caused by unjustified actions of others who are ultimately held responsible and blamed (Wetzer et al., 2007). Using this conceptualization, Gelbrich (2010) shows that frustrated consumers complain in an attempt to solve the problem, while angry consumers complain to punish the company. However, several accounts contradict this perspective and consider frustration a milder form of anger (Berkowitz, 1993; Richins, 1997). This approach is advocated also by hierarchical theories of anger that conceptualize frustration as one of the feelings belonging to the emotional mode of anger (Laros & Steenkamp, 2005; Shaver et al., 1987). To reconcile this inconsistency, some scholars suggested that, while frustration and anger might imply different appraisals (Roseman, 1991), in practice, the extent to which people really differentiate between the two emotions depends on individual and contextual differences (Kuppens et al., 2007). In this respect, scholars have shown that angry consumers are almost invariably also frustrated (Kuppens et al., 2007). The difficulty in finding a way to differentiate between the two emotions that holds under all circumstances (Kuppens et al., 2007) suggests that frustration and anger are very closely interlinked.

Another stream of research has focused on rage (e.g., McColl-Kennedy, Patterson, Smith, & Brady, 2009; Patterson, McColl-Kennedy, Smith, & Lu, 2009; Surachartkumtonkun, McColl-Kennedy, & Patterson, 2015). According to the existing literature, rage entails a form of anger that is high in arousal and often caused by repeated negative encounters with a company, comprising the concurrent activation of several negative emotions, including contempt and disgust (McColl-Kennedy et al., 2009; Surachartkumtonkun et al., 2015; Xie & Bagozzi, 2019). The literature thus suggests that anger spans a wide array of emotional experiences, from milder feelings of

annoyance and irritation to more intense, high-arousal expressions of resentment, rage, and hate (Shaver et al., 1987). The suitability of the label *anger* to such a broad range of feelings has led to inconsistent conceptualizations across studies, suggesting that anger leads to seemingly contradictory forms of consumer behavior.

Measuring anger

The inconsistency in conceptualizing anger has implications for its measurement. As illustrated in Table 1, studies often operationalize anger using a mix of items tapping into both the vengeful and supportive facets of this emotion concurrently (Kalamas et al., 2008; Romani et al., 2013). Furthermore, while seminal psychological research suggests that the range of emotion words linked to the prototype of anger tends to be wide (Shaver et al., 1987), consumer researchers use a relatively narrow range of items. Three studies have explicitly developed scales to measure consumer anger. Richins (1997) captures this emotion with three items, namely, *frustrated*, *angry*, and *irritated*. Laros and Steenkamp (2005) add three additional items, *hostile*, *unfulfilled*, and *discontented*. Finally, Romani and colleagues (2012) propose a completely different repertoire comprising *indignant*, *annoyed*, and *resentful*. These studies tend to conflate words with clearly aggressive connotations (e.g., *hostile*, *resentful*) with words designating milder feelings (e.g., *frustrated*, *annoyed*, *irritated*).

Antecedents of anger

Extant research has also produced a significant amount of evidence concerning the antecedents of consumer anger (Antonetti, 2016). Previous studies identify *perceived severity*, *perceived blame*, *perceived unfairness* and *perceived negative motives* as four key appraisals that play a crucial role in the psychological activation of anger (Antonetti, 2016; Berkowitz, 1993; Kuppens,

Van Mechelen, Smits, & De Boeck, 2003). Overall the evidence suggests that these antecedents are linked not only to anger, but also to related negative emotions such as frustration and rage (McCull-Kennedy et al., 2009; Patterson et al., 2009; Surachartkumtonkun et al., 2015). In other words, there is limited evidence that these antecedents are associated *only* with one specific emotional experience that can be labelled as “anger” (Berkowitz, 1993; Kuppens et al., 2003).

Perceived severity denotes the degree of inconvenience caused by a failure and has been identified as a key driver of consumer anger (Grégoire et al., 2010; Joireman et al., 2013). Research has also linked perceived severity to frustration and rage. Consumers become frustrated when they feel to have incurred a large loss as a result of a brand failure (Smith, Bolton, & Wagner, 1999). In this sense, the primary concern of consumers is to rectify the problem to diminish the immediate loss. Moreover, as the level of severity increases, desire for revenge (Joireman et al., 2013) and consequent rage are triggered (McCull-Kennedy et al., 2009). Angry customers engage in vindictive behavior in order to fulfil their motivation to vent feelings and take revenge (Joireman et al., 2013; Wetzer et al., 2007). Hence, perceived severity is expected to influence anger and its consequent behavioral outcomes.

Perceived blame refers to attributions of responsibility for the negative event (Roseman, 1991). Research has consistently linked blame attributions to anger (Gelbrich, 2010; Kuppens et al., 2003; Su, Wan, & Wyer, 2018). As discussed earlier, some scholars conceptualize blame as a key dimension in the differentiation between frustration and anger (Gelbrich, 2010; Roseman, 1991). By distinguishing between situational and external blame (i.e., blame the event versus blame the company), Gelbrich (2010) shows that frustration is associated with situational blame, while anger results from external blame. There is also evidence however that consumers often show bias in their blame attributions and tend to externalize blame to the company (Weiner, 1985, 2000). This

is especially the case in a marketing context, where the cause of dissatisfaction with a service or product is typically attributed to the company, even if other parties might also be at fault (Bechwati & Morrin, 2003). Given that a first concern of consumers is typically problem resolution (Smith et al., 1999), blame is expected to elicit frustration. There is, however, workplace (Crossley, 2009) and revenge research (Bechwati & Morrin, 2003) suggesting that, as blame attributions increase, individuals experience stronger feelings of rage (Surachartkumtonkun et al., 2015).

There is evidence that blame attributions are less important than appraisals of unfairness when explaining consumer revenge (Grégoire et al., 2010). Appraisals of unfairness (or injustice) have been linked to vindictive responses in prior literature (Aquino, Tripp, & Bies, 2006; Grégoire & Fisher, 2008; Kim, Park, & Lee, 2018). Perceived unfairness represents the appraisal that the company's misbehavior has breached some important norm or rule (Aquino et al., 2006; Grégoire & Fisher, 2008). Perceived unfairness is a key cognition underpinning the evaluation of social exchanges, including consumer-brand exchanges. As brand failures denote the breach of important social norms, these events are often subject to fairness judgments (Cropanzano, Byrne, Bobocel, & Rupp, 2001). When perceptions of unfairness linked to a brand failure increase, a desire for retribution aimed at restoring justice is activated (Carlsmith, Darley, & Robinson, 2002). Literature suggests that anger can support this process by activating a level of arousal which is conducive to retaliation (Fehr & Gächter, 2002). It is therefore expected that unfairness influences rage, consistent with past research on this emotion (Surachartkumtonkun et al., 2015). At the same time, evidence that a certain outcome is unfair creates the urgency to deal with the problem experienced (Roseman, 1991; Su, Wan, & Wyer, 2018). Consequently, it is expected that unfairness also influences frustration.

Perceived motives denote beliefs about the intent of the company, whether to pursue self-interests (i.e. negative motives) or to help the customer (i.e. positive motives, Joireman et al., 2013). Perceived motives represent an important cognitive process spontaneously activated by consumers in the context of negative events such as brand failures, whereby an attempt is made to establish the character of the responsible party (Kramer, 1994; Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002). There is evidence showing that the valence of inferred motives directly influences customer anger (Crossley, 2009; Grégoire et al., 2010; Joireman et al., 2013). When highly negative motives are inferred, the wrongdoer is perceived to act with greed and selfishness (Crossley, 2009; Joireman et al., 2013). Perceptions of greed are an important aspect of the psychology of hate, thus likely to motivate feelings of rage (Antonetti, 2016; Sternberg, 2003). The literature on rage has shown that perceived unfairness is an important driver of this emotion (Surachartkumtonkun et al., 2015). By contrast, when inferred motives are mildly negative and brand failures are attributed to negligence as opposed to opportunism, desire for revenge weakens and reconciliation is sought (Joireman et al., 2013). In the latter circumstances, perceived motives are linked to milder feelings of frustration and irritation.

All in all, the evidence reviewed concurs that severity, blame, fairness and perceived motives activate a range of different emotions including frustration, anger and rage. This suggests that these three feelings are often jointly activated and share a common “emotional space” (Surachartkumtonkun et al., 2015).

Consequences of anger

Anger has been associated with a range of negative consumer behaviors. Scholars have mainly differentiated between constructive customer outcomes, which imply a possibility of reconciliation, and outcomes linked to vindictive motivations, such as motivations to harm

(Romani et al., 2013) or sabotage the brand (Kähr, Nyffenegger, Krohmer, & Hoyer, 2016). Gelbrich (2010) differentiates between problem-solving complaints and vindictive complaints. The former type includes situations where a consumer protests to the company's representatives in order to seek a resolution to the problem. In this respect, "*problem-solving complaining is constructive: the complainers try to analyze and fix the problem in a rational way (Folkes et al. 1987)*" (Gelbrich, 2010, p. 571). Vindictive complaining entails a desire to penalize the company for its misbehavior (Gelbrich, 2010). Vindictive complaining implies aggressive behavior aimed at punishing the company indirectly by attacking its employees (Grégoire & Fisher, 2008). This differentiation is managerially important as it distinguishes between a potentially positive outcome for the company, which leads to improvements through cooperation with consumers, and a negative outcome motivated by a desire for retaliation.

Modelling the two facets of consumer anger

The preceding discussion highlights that anger, frustration and rage are closely interlinked emotions. Hierarchical theories of emotions, which study how emotions are organized in human language, offer an interpretative lens to clarify such complexity. Hierarchical theories differentiate between a *superordinate* level, a *basic* level and a *subordinate* level in the analysis of emotions (Laros & Steenkamp, 2005; Shaver et al., 1987). The superordinate level includes general classes of emotional valence (i.e., positive vs negative affect). The basic level includes, depending on the specific model considered, a range of discrete emotions such as for example fear, anger, disgust, guilt, joy and love (Laros & Steenkamp, 2005). The subordinate level includes feelings that are most representative of the underlying basic emotion. For example, in their hierarchical model of emotions, Laros and Steenkamp (2005) indicate that *frustrated*, *angry*, *irritated*, *hostile*, *unfulfilled*, and *discontented* are all subordinate feelings used in language to reflect the basic

emotion of anger. While hierarchical theories vary (e.g., Johnson-Laird & Oatley, 1989; Shaver et al., 1987; Storm & Storm, 1987), they assume that frustration and rage are subordinate feelings that describe the higher level label of anger.

Past research, however, has not retained this insight. Anger, frustration and rage are often implicitly described as three discrete emotions, all examined at the basic level of analysis (Antonetti, 2016). The subordinate level of analysis has thus been overlooked in previous research. This has led to a confusing use of the label *anger* as an emotion that can apply to many different experiences and that can predict both supportive and vindictive outcomes. In this study, we extend current conceptualizations of anger by theorizing two facets that summarize the subordinate feelings to the basic emotion of anger. Considering explicitly the semantic relationships between anger, frustration and rage (Johnson-Laird & Oatley, 1989; Shaver et al., 1987), we argue that frustration and rage should be conceptualized as specific subordinate feelings to anger that belong to the wider constellation of emotional experiences represented by the supportive and vindictive facets of anger, respectively.

Our logic is consistent with work by Antonetti (2016) that proposes a conceptual differentiation between a problem-focused and a vengeful form of anger. We develop further this idea by identifying and empirically testing two scales capturing the two facets of anger. Supportive anger motivates problem resolution and includes items measuring frustration, annoyance and mild anger. Vindictive anger, which is stronger, vengeful, and motivates vindictive behavior, and taps into items measuring intense anger, rage and outrage. Our proposed model is presented in Figure 1.

INSERT FIGURE 1 HERE

Study 1

Method

Research design, participants, and procedures. The empirical analysis starts by verifying whether, consistent with the proposed model, consumers loosely refer to anger in order to characterize a wide range of different negative experiences with companies/brands. Our reasoning would suggest that when considering incidents that have caused anger, consumers refer also to feelings of frustration and rage. On the contrary, if the three emotions are fully differentiated, consumers' accounts should refer predominantly to the three discrete emotions separately, with minimal overlaps. To test this proposition, a study based on the Critical Incident Technique (CIT) was conducted consistent with prior research (e.g., Bitner, Booms, & Tetreault, 1990; Voorhees, Brady, & Horowitz, 2006). We asked participants to describe an unsatisfactory experience (having occurred in the previous six months) with a brand/company that made them feel angry. We instructed participants to provide a detailed account of the negative encounter and report the emotions experienced. Consistent with prior research (Shaver et al., 1987), participants were prompted to “[...] think of what exactly did you feel and think during this experience? What exactly did you say during this experience?”.

A sample of 214 critical incidents described by U.S consumers was collected from the large online panel Prolific Academic (see Peer, Brandimarte, Samat, & Acquisti, 2017) (33% male, 11% were 18-24 years old, 37% were 25-34 years old, 25% were 35-44 years old, 18% were 45-54 years old, and 9% were 55 years old or above). Nine incidents were eliminated because they did not meet the selection criteria. For example, some incidents failed to provide an account of the experience and of the negative emotions elicited. Finally, 205 valid incidents were used for the analysis. Reported types of unsatisfactory experiences spanned across a variety of sectors

(Hospitality services: 12%; Retailing: 38%; Telecommunications: 9%; Banking: 5%; Utilities: 2%; Delivery: 2%; Auto repair: 5%; Transport: 3%; Other: 24%).

One of the authors and one independent researcher, who was blind to the research questions, independently analyzed the data following the CIT procedure (e.g., Bitner et al., 1990; Flanagan, 1954; Kim et al., 2018). The coders repeatedly read and sorted sentences in the reported incidents into emotion categories pre-defined based on the literature. The two coders also independently classified the incidents based on the vindictive or problem-solving motivations of consumers; both motivations were also defined based on the literature (Gelbrich, 2010). The two coders then liaised and resolved any discrepancies through discussion. Interrater agreement on the categorization of the incidents was 80.29% (Perreault & Leigh, 1989). The analysis resulted in the identification of two major facets of anger and the range of negative emotions closely related to each facet.

The qualitative coding conducted by the two researchers was further validated through the use of automated analysis of word usage based on LIWC software (Linguistic Inquiry and Word Count, LIWC; Pennebaker, Booth, Boyd, & Francis, 2015). The LIWC software has been widely employed in social psychology and marketing to study emotions, personality traits and communication styles (Hall, Verghis, Stockton, & Goh, 2014; Pennebaker, Mehl, & Niederhoffer, 2003; Winkler, Rieger, & Engelen, 2020). For present purposes, the software analyzed the text of all 205 critical incidents in our sample in order to determine the usage of the substantive emotion category of anger, along with frustration and rage. The software calculated the emotion categories as a percentage of the overall word count, which amounted to 50,825 words (cumulative word count based on 205 critical incidents). Given that the existing dictionaries of anger words in LIWC do not include all emotion words used for our qualitative analysis, we created our own dictionary. The newly created dictionary included, for instance, words such as “upset”, “disappoint*”,

“irritat*”. The software matched individual words in the critical incidents to the words included in our dictionary and calculated a percentage for word usage. As a result, we were able to detect the percentages of words tapping into the emotions of anger, frustration and rage and deduce occurrences where emotion words co-occurred¹.

Results

The results based on the qualitative coding, including examples of the two facets of anger, frequencies, and excerpts are summarized in Table 2. Anger is a term that consumers employ very loosely when describing the feelings associated with negative encounters with a brand/company. Crucially, the results indicate the presence of two forms of anger: one constructive, aimed at problem resolution, and another vindictive, aimed at seeking revenge against the company. The first form of anger is common when consumers refer to anger in conjunction with feelings of *frustration, irritation, disappointment or annoyance*. The second form of anger is more common when participants talk about feeling angry, together with feelings of *rage or fury*.

Although we specifically asked for experiences that had caused anger, only in 19 cases (9.3%) participants recalled exclusively this emotional experience. In 34 cases (16.6%), participants mentioned only frustration, with no references to anger, and in 86 cases (41.9%), participants mentioned together anger and frustration. Rage was less prevalent being mentioned in 23 cases (11.7%). Out of these cases, however, 10 included mentions of rage and anger together and in 8 cases participants mentioned the three emotions together.

¹ We did not use LIWC to code the motivations associated with the emotions because the software, while providing the share of word usage, does not consider the context in which words are used. This part of the analysis cannot be automated (Kangas, 2014).

Both emotions were described as resulting from below-par performance, poor interpersonal treatment, or unfair behavior on the part of the company/brand or its employees. Notably, participants' rich descriptions revealed constructive as well as vindictive motivations underpinning the two forms of anger. In particular, when anger tapped into feelings of irritation, disappointment, and frustration more generally, consumers expressed an explicit desire for reconciliation aimed at finding a resolution. When anger tapped into rage and fury, participants showed tendencies to seek revenge in order to punish the company/brand for its wrongdoing.

The results of the automated analysis of word usage based on LIWC revealed that, consistent with our qualitative analysis, words tapping into the emotions of anger and frustration were most recurrent in the dataset, representing 0.84% and 0.85% of the total word count (of 50,825 words), respectively. As in our qualitative coding, this result contradicts the idea that anger and frustration are neatly separated emotions. If that would have been the case, we should have found different percentages and, given that the protocol asked for anger experiences, anger mentions should have been much more common than mentions of frustration. The share of words tapping into rage was much lower (0.08%). We found, as expected, that the three emotion words are rarely used in isolation. While the occurrences in which frustration alone (0.12% of the total word count) or anger alone are mentioned (0.11% of the total word count) are limited, these two emotions are used together in the majority of cases (1.03% of the total word count). This finding corroborates the empirical evidence on the significant overlap between these two emotions. Likewise, rage is often mentioned alongside anger (0.07% of the total word count) or alongside both anger and frustration (0.29% of the total word count). Overall, this analysis is consistent with the results of the qualitative coding and indicates that the domain of anger overlaps significantly with that of frustration and rage.

INSERT TABLE 2 ABOUT HERE

Discussion

Consumers' own accounts appear to support the existence of two different facets of anger. A facet, characterized by the blending of feelings of frustration and mild anger, is supportive to companies as primarily aimed at problem resolution. Another facet, comprising intense feelings of anger and rage, can reveal rather problematic to companies as linked to a desire for revenge. To test formally the model outlined in Figure 1 and assess the psychometric properties of the scales measuring the two facets of anger, we conducted Study 2 and Study 3.

Study 2

Method

Research design, participants, and procedures. This investigation formally tests the model proposed in Figure 1. Using the same procedures of Study 1, a sample of British consumers was surveyed. The panel provider screened participants to ensure that they had all gone through at least one unsatisfactory experience that made them feel angry over the last six months². At the beginning of the survey, participants provided a written account of the experience (e.g., Bougie, Pieters, & Zeelenberg, 2003; Joireman et al., 2013). Next, they completed a structured questionnaire measuring perceptions of severity, unfairness, blame, perceived motives, negative emotions, and behavioral responses. Finally, they answered demographic questions (e.g., age, gender). For this study, 390 fully completed questionnaires were analyzed, of which 62% were completed by

² The distribution of industries is consistent with Study 1.

females. Different age groups were represented: 16% were 18-24 years old, 40% were 25-34 years old, 20% were 35-44 years old, 16% were 45-54 years old, and 8% were 55 years old or above.

Measures. Established scales from prior research were employed. Measures for perceived severity, perceived blame, perceived negative motives and perceived unfairness were borrowed from Grégoire et al. (2010), and measures of vindictive and problem-solving complaining were adapted from Gelbrich (2010). To assess frustration, anger and rage twelve items associated with these three emotions in past studies were considered (Laros & Steenkamp, 2005; Romani et al., 2012; Shaver et al., 1987). A pretest (N = 250) allowed the identification of six items that capture supportive anger and six items measuring vindictive anger. The details of all scales used are presented in Table 3.

Results

We ran a Confirmatory Factor Analysis (CFA) to assess the measurement model using IBM SPSS AMOS (version 23). Standardized loadings were all above .60, average variance extracted (AVE) scores were above .50, and the composite reliability (CR) values exceeded .70. Detailed results are presented in Table 3. Consistent with the Fornell and Larcker (1981) criterion, the AVE for each construct is greater than their squared correlation (see Table 4). Overall the measurement model yielded good fit. The chi-square value was significant ($\chi^2_{(436)} = 943.49, p < .001, \chi^2/df = 2.16$) due to the sensitivity of this statistic to sample size. Other key fit indices (e.g., root mean squared error of approximation index (RMSEA) = .055; standardized root mean square residual (SRMR) = .052; comparative fit index (CFI) = .94, Tucker-Lewis index (TLI) = .94) suggested good fit.

Next, we examined the structural model using the same software. The model offers good fit ($\chi^2_{(446)} = 1124.16, p < .001, \chi^2/df = 2.47; RMSEA = .063; SRMR = .080; CFI = .92, TLI = .91$). The unique mediating effects of supportive and vindictive anger were calculated while also taking into account age and gender as covariates. Indirect effects were estimated using bias-corrected bootstrapping with 5,000 resamples for the estimation of confidence intervals. The structural model is presented in Table 5, and the relevant indirect effects in Table 6. The results showed that severity, blame, unfairness and negative motives influenced supportive anger, but severity and unfairness lead only to vindictive anger. The emotions mediate the influence of service failure appraisals on either problem-solving or vindictive complaining. All indirect effects are consistent with the hypothesized mediating mechanisms.

Since both independent and dependent variables were collected using the same instrument, common method bias (CMB) might have inflated the strength of the relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To assess the impact of CMB, the model is estimated again, adding an additional latent factor measured by the indicators of all constructs in the conceptual model (Podsakoff et al., 2003). Table 5 shows the structural parameters controlling for CMB. Furthermore, Table 7 shows the proportion of variance accounted for by the variables in our model, with and without the CMB factor in the model. All the hypothesized paths remained significant after the inclusion of the additional latent factor. Furthermore, CMB did not affect meaningfully the amount of variation accounted for by the model. Overall, the evidence indicates that CMB does not appear to have a significant impact on the results.

INSERT TABLE 3, 4, 5, 6 AND 7 HERE

Discussion

The results support the conceptual model proposed and the differentiation between supportive and vindictive facets of anger. The two sets of items capture emotional reactions leading to different consumer motivations and behaviors. Conceptually and managerially, it is much more effective to consider and assess the two facets of anger identified here, as opposed to just one single scale of anger, when seeking to predict vindictive and problem-solving responses. A comparison of our measures with some of the scales used in earlier research highlights the importance of the differentiation proposed in this study. Previous studies reviewed in Table 1 conflate, under the generic label of anger, items more associated with the supportive facet (e.g., irritation, angry, mad) and items associated with the vindictive facet (e.g., outraged, furious). Similarly, the items used by Richins (1997) only focus on the supportive facet (frustrated, angry, and irritated). Our conceptualization allows considering both subordinate facets of anger and their respective motivational outcomes.

The findings also show that supportive anger and vindictive anger share the same appraisals. There is no evidence that appraisals of blame are important in vindictive forms of anger only, as suggested in prior research (Gelbrich, 2010). The evidence reinforces our argument that, rather than being fully differentiated emotions, frustration and rage share the conceptual domain of anger (Shaver et al., 1987; Storm & Storm, 1987). Frustration and rage tend to coexist because more intense, vindictive anger can develop in addition to milder, problem-focused feelings (Patterson et al., 2009). Unlike blame and severity, perceived unfairness is strongly associated with vindictive anger. Perceived unfairness seems to increase the occurrence of rage responses, though without suppressing the desire to find a solution. Perceived negative motives instead influence only supportive anger. This study focuses on sampling different types of anger experiences. To test the

robustness of these findings, Study 2 was replicated, but sampling instances of complaints from consumers.

Study 3

Participants and procedures. A sample of American residents was recruited online, using the same procedures as Study 2. Replications are considered useful in SEM studies to probe the stability and validity of a set of relationships (Bollen & Pearl, 2012). Sampling participants from a different country further allows to assess the scales in another cultural context, thus boosting the external validity of our research (Goodman & Paolacci, 2017; Lynch, 1982).

Participants recalled an unsatisfactory encounter with a company/brand that they experienced in the previous six months and that led them to complain. Both instructional and attention checks were included in the survey (Oppenheimer, Meyvis, & Davidenko, 2009). Five participants who failed the attention checks were excluded from the analysis. The final sample comprised 360 complete surveys, 78% of which were female. Different age groups were represented: 11% were 18-24 years old, 42% were 25-34 years old, 26% were 35-44 years old, 15% were 45-54 years old, and 6% were 55 years old or above.

Measures. The study retained the same measures of Study 2, which showed robust psychometric properties (see results in Tables 3 and 4).

Results

The measurement model offered good fit ($\chi^2_{(436)} = 1031.01, p < .001, \chi^2/df = 2.36; RMSEA = .062; SRMR = .056; CFI = .93, TLI = .92$). As illustrated in Table 3, the constructs did not raise concerns of convergent reliability. Discriminant validity was supported, as indicated by the Fornell-Larcker criterion (1981).

The structural model also achieved good fit ($\chi^2_{(446)} = 1163.82, p < .001; \chi^2/df = 2.61; RMSEA = .067; SRMR = .074; CFI = .92; TLI = .91$). Following the procedures used in Study 2, structural parameters were estimated. Results are presented in Table 5 and Table 6. The results were consistent with Study 2 and showed that supportive and vindictive anger influence problem-solving and vindictive complaining, respectively. As in Study 2, we estimated the structural model with the addition of the common latent factor to the model (Podsakoff et al., 2003). The parameters and the variance estimated when controlling for CMB are presented in Table 5 and Table 8, respectively. CMB does not appear to influence the results.

INSERT TABLE 8 HERE

Discussion

These results offer additional support for the two facets of anger, even when the analysis concerns anger experiences that led to a complaint. Severity and perceived unfairness are the primary predictors of vindictive anger, a finding which in turn explains exclusively vindictive behavioral tendencies. Importantly, supportive anger does not explain vengeful complaining, but acts as a benign indicator of dissatisfaction that leads consumers to complain constructively to the company in an effort to seek problem resolution.

General discussion

Theoretical contributions

This study builds on hierarchical theories of emotions (Laros & Steenkamp, 2005; Shaver et al., 1987) to explore the novel idea in existing marketing research that the basic emotion of anger includes two subordinate facets, which can be more or less detrimental to companies. Most scholars developing models that treat anger as a global construct tend to retain scales of anger

borrowed from past research. This study shows that, rather than using the generic label of *anger*, researchers should distinguish between supportive and vindictive anger as two facets of the same emotion that predict different forms of consumer behavior.

The results from our studies highlight two major theoretical implications. First, our findings explain why in past research, some studies associated anger with a problem-solving orientation (Kalamas et al., 2008; Koppitsch et al., 2013; Romani et al., 2013), while others conceptualized anger as an emotion that leads to retaliation (Grégoire et al., 2010; Joireman et al., 2013). Second, our findings highlight the need for scholars to ensure precision in establishing the facet of anger under investigation in a particular study. Treating supportive and vindictive anger as different facets of anger contributes to the development of detailed theories that can account for both the cooperative and the vindictive sides of this emotion.

Acknowledging the two facets of anger and the fact that frustration and rage are subordinate feelings to the basic emotion of anger offers important conceptual advantages. It allows to move beyond the use of anger as a generic label that can have disparate consequences in terms of consumer behavior (Antonetti, 2016). It also helps to avoid considering anger as an exclusively vindictive or supportive emotion. This stance has yielded contradictory findings in past research between those who claimed that anger is vindictive, in contrast to frustration that would be a supportive emotion (Gelbrich, 2010), and those who claimed that anger is supportive, in contrast to contempt that would be a vindictive emotion (Romani et al., 2013). The two facets presented in this research, which are consistent with hierarchical theories (Laros & Steenkamp, 2005; Shaver et al., 1987), reconcile this evidence and clarify how anger as a basic emotion can manifest itself in two different facets.

Our study extends past research on the measurement of negative emotions. First, the research shows how extant scales measuring anger conflate both the vindictive and cooperative sides of the emotion. We show that both cooperative and vengeful tendencies of anger tend to coexist in most negative experiences reported by consumers, yet such tendencies can be measured and clearly differentiated. With that in mind, our study offers two scales that allow for the measurement of the two facets of anger. While recognizing the complex and changing nature of anger, the proposed measures should help scholars to monitor supportive as well as vindictive tendencies of this emotion.

Finally, our study contributes to past research on anger by testing the relative influence of the appraisals on both anger facets. In particular, we show that severity, blame, fairness and perceived negative motives are all highly relevant appraisals in anger experiences, whether focused on problem resolution or seeking revenge. Such a finding is important in demonstrating that there is a two-dimensional consumer view of negative emotional experiences. Consumers seek to primarily resolve the problem, but their emotions escalate when there is a feeling of being treated unfairly. An interesting result in this respect concerns evidence of a strong relationship between unfairness and feelings of vindictive anger (Kim et al., 2018; Surachartkumtonkun et al., 2015). This suggests that, when the brand failure encompasses perceived unfairness, the tendency to retaliate will be strong and it will be more difficult to ask consumers to cooperate with the company. This finding is consistent with prior research on consumer revenge (Grégoire et al., 2010). However, our study offers a new theoretical explanation of the reason why consumer motivation to cooperate persists despite the intention to seek revenge. The implication is that, by monitoring both supportive and vindictive anger, it is possible to predict the extent to which

dissatisfied consumers are willing to cooperate or retaliate, and to evaluate the relative effectiveness of recovery strategies aimed at influencing consumer reactions.

Managerial implications

These results present notable implications for marketing practice. To start, we offer evidence that could reveal promising for service companies and, particularly, departments and staff who are in direct contact with customers. In fact, we demonstrate that anger is not always detrimental for companies as consumers have a two-dimensional view of negative emotional experiences. Several consumers experience supportive anger, primarily motivated by a desire for reconciliation. This group of consumers are focused on the problem and its resolution. Others experience vindictive anger, motivated by a desire to seek revenge from the company. The latter form of anger is especially prominent when companies fail at finding a form of reconciliation.

Knowledgeable of the existence of a supportive form of anger aimed at problem-solving and reconciliation, companies are advised to review their approaches to the measurement of anger. In this respect, the findings advise to use items that are able to identify correctly the constructive facet of anger. We advise that measuring feelings of anger as a global concept, without differentiating between the two facets of anger identified in this research, will not allow for the prediction of consumers' hostile motivation and behavior. The items proposed in this research ensure a fine-grained measurement of anger experiences, which accounts for the vindictive and supportive facets of this emotion. The efficacy of the proposed measures lies in their ability to tap into both benevolent and vindictive facets of the same emotion.

A related implication concerns the effective management of customer anger. Anger does not always lead to aggressive, confrontational forms of complaining (Fischer & Roseman, 2007).

Rather, as our evidence shows, anger can be constructive and underpinned by consumers' desire to find a solution to the problem encountered. Consequently, anger is not always a threat to companies and it can be turned into an opportunity, if detected in a timely manner and managed effectively. To be able to promptly detect anger, marketing managers should create opportunities and processes for consumers to easily share their concerns to employees directly, or via customer surveys and/or monitored online reviews. Once detected, in order to manage customer anger, companies should think innovatively on how to make consumers feel part of the problem resolution. To this end, consumers could, for instance, be asked to express their preference on a proposed resolution and/or even propose a resolution.

Companies are also advised to be aware of the fact that, in circumstances where the situation escalates and/or customers feel treated unfairly, feelings of vindictive anger are elicited. When feeling vindictive, consumers seem to actively look for opportunities to seek revenge against the company. Retaliating against the company is a mechanism for consumers to restore their own sense of justice. Given our evidence, companies should find advantage in identifying and managing anger outbursts, not only if and when these occur face-to-face, but also when these occur online. Online channels typically provide a platform for customers seeking easy, anonymous revenge, and can reveal particularly detrimental for companies given the potentially wide audiences reached. Companies should especially aim to detect feelings of vindictive anger where consumers perceive unfair treatment. Identifying vindictive anger should enable companies to realistically assess the extent to which consumers are likely to behave in a hostile manner toward the company.

Limitations and areas for further research

While the two facets of anger apply to a wide range of consumer situations, these might not apply to all anger experiences. It is possible that other forms of anger exist that are specific to a particular social context. A good example concerns debates on moral outrage as a specific type of anger that relates to moral violations (Batson, Chao, & Givens, 2009). Further research can explore the existence of other forms of anger that apply to specific consumption contexts.

While the analysis focused on distinguishing between supportive and vindictive facets of anger, evidence suggests that, over time, milder negative emotions can become ‘hotter’, and more damaging (Kalamas et al., 2008; Surachartkumtonkun et al., 2015). Future research could usefully examine this process longitudinally, to clarify what drives consumers to shift from one form of anger to the other. It would also be interesting to investigate whether and how the reverse process is possible: moving from a situation characterized as vindictive anger to one where consumers predominantly experience supportive anger. Future research should investigate time-specific dynamics that explain changes in individual affective experiences.

Recovery strategies can reduce feelings of anger. For example, explanations (Grewal, Roggeveen, & Tsiros, 2008) and apologies (Roschk & Kaiser, 2013) can sometimes appease anger. Furthermore, perceptions of power can lead to reduction in feelings of anger following a service failure (Sembada, Tsarenko, & Tojib, 2016). However, research has conflated the two facets of anger and made it difficult to know which of the two emotional forms is actually influenced by a given response strategy. Interesting insights might emerge from investigating the effect of recovery strategies on the two facets of anger. For example, an apology might reduce vindictive anger while leaving supportive anger unaffected. This might be due to the fact that while restoring the image of the wrongdoer (Roschk & Kaiser, 2013), an apologetic message does not actually fix the

problem. Conversely, compensation might reduce both vindictive and supportive facets of anger by showing contrition and offering a tangible attempt to resolve the problem (Grewal et al., 2008). Future research should examine the emotional implications of different recovery strategies more closely, as well as their relative impact on the two different facets of anger. Finally, future research would benefit from examining different types of problem-solving behaviors triggered by supportive anger and contingent factors that might reinforce the effect of supportive anger on cooperative reactions from consumers.

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Table 1: Studies on anger in the customer revenge literature

Study	Research focus	Method	Items used to measure anger	Antecedents of anger	Outcomes of anger	Key findings
Bougie et al. (2003)	Differentiates between anger and dissatisfaction in service failures	S1&2: Survey (recollection of negative experiences)	S1: Feeling like you'd explode; overwhelmed by emotions S2: Enraged, angry, mad	Dissatisfaction	Revenge (switching, complaining, NWOM)	Anger and dissatisfaction are different; anger mediates the relationship between service dissatisfaction and revenge behaviors
Cronin et al. (2012)	Examines how moral anger influences approach and confrontational actions following unethical corporate practices	S1&2: Survey (real- case of unethical corporate practice)	Angry, hostile, irritable, outraged, mad	Legitimacy of the firm's dominant position in the market	Approach and confrontation behaviors	When corporate practices are perceived as illegitimate (legitimate), consumers experience more (less) anger and desire to protest (recommend the firm)
Gelbrich (2010)	Examines the moderating role of helplessness on coping with anger and frustration following a service failure	S1: Experiment (scenarios) S2: Survey (recollection of negative experiences)	Angry, mad, furious	Blame (seen to differentiate between anger and frustration)	Confrontative coping (support-seeking coping linked to frustration)	Anger (frustration) and helplessness enhance vindictive (support-seeking) NWOM; anger (frustration) and low helplessness enhance vindictive (problem-solving) complaining
Grappi et al. (2013)	Develops and tests a model of consumer reactions to corporate offshoring decisions	S1&2: Field experiments (scenarios of product- and service-focused offshoring strategy)	Angry, very annoyed	Corporate offshoring strategies	Attitudes toward the firm, WOM	Positive (gratitude) and negative (righteous anger) moral emotions explain attitudes toward the firm and WOM in offshoring decisions
Grégoire et al. (2010)	Develops and tests a model of revenge in service failures	S1: Survey (recollection of negative experiences) S2: Survey with a multi-stage design (recollection of negative experiences)	Anger, outrage, indignation and resentment	Blame. fairness perceptions, inferences of motives	Desire for revenge	Negative motive inferences mediate the relationship between anger and desire for revenge, which in turn explains revenge behaviors
Joireman et al. (2013)	Examines reactions to double deviations and conditions under which	S1: Survey (recollection of a negative	Outrage, resentful,	Severity, blame,	Desire for revenge	Inferences of motives explain reactions and can result in

	consumers show forgiveness	experiences) S2: Experiment (scenarios) S3: Experiment (scenarios)	indignation, anger	inferences of motives		consumers giving a second chance after double deviations
Sembada et al. (2016)	Examines the role of customer power in lowering negative reactions toward the firm following service failures	Three experiments (scenarios)	Outraged, resentful, indignant, angry	Power, service failure context	N/A	High power in double deviations results in negative framing of secondary appraisal, which leads to greater failure severity and anger, revenge, and demanded compensation
Strizhakova et al. (2012)	Examines the coping mechanism triggered by anger following service failures	Two experiments (scenarios)	Anger, frustration and irritation	N/A	Rumination	Rumination about the service failure mediates consumers' coping with anger and purchase intentions and NWOM
Wetzer et al. (2007)	Examines the emotions and goals of consumers engaging in NWOM	S1: Survey (recollection of an experience of NWOM) S2: Experiment (recollection of episode where the target emotion had been experienced)	Anger	N/A	NWOM	Consumers who experience anger engage in NWOM to vent their feelings or seek revenge
Xie & Bagozzi (2019)	Examines the role of moral emotions and attitudes in mediating the effect of corporate social irresponsibility on consumer responses, with boundary conditions	Experiment (scenarios)	Angry, mad, very annoyed + Contemptuous, scornful, disdainful	Corporate social irresponsibility	NWOM, complaining, boycotting	Negative moral emotions of anger and contempt mediate the effect of corporate social irresponsibility on consumer negative responses. Contempt is more prominent than anger among people with high empathy, social self-concept and moral identity

Table 2: Results from the qualitative component of the CIT survey

Negative emotions	Frequencies	Percentage out of all emotion descriptions (%)	Qualitative comments	Outcomes	Frequencies	Percentage out of all outcome descriptions (%)
Anger	156 out of 205	76.10%	<i>I felt angry, I felt let down with my purchase...I had to return to the store and aired my concern about the problem happening (I-26)</i> <i>I was angered at getting ignored, especially since I was a paying customer. I felt like leaving the shop (I-10)</i>	Problem-solving	109 out of 156	69.87%
				Vindictive	47 out of 156	30.13%
Anger alone	19 out of 205	9.27%	<i>I felt very angry being passed from pillow to post. No one knowing what to do or who could help. I am still really angry as the issue still has not been resolved (I-110)</i> <i>I was angry even after I returned home so sent an email to the company. I will never visit the same shop again (I-176)</i>	Problem-solving	15 out of 19	78.95%
				Vindictive	4 out of 19	21.05%
Anger with frustration and rage	8 out of 205	3.90%	<i>I felt very angry and frustrated. I thought the company were incompetent and not worthy of using again...I spent a lot of time controlling the internal rage as much as I did trying to find a resolution (I-91)</i> <i>Furious. Both energy companies have refused to be helpful and this has led to frustration, stress and a great deal of anger. All of which I'm feeling now! (I-8)</i>	Problem-solving	4 out of 8	50%
				Vindictive	4 out of 8	50%
Frustration	152 out of 205	74.15%	<i>Thought annoyed and frustrated! That considering the price of tickets delays should not last that long! Stressed that was going to be late to meet friend! Annoyed would not get a place at festival to see band as so late! (I-25)</i> <i>I felt annoyed, disappointed and frustrated. I thought it was very poor that the company could allow this to go unnoticed...it has put me off ordering from them again (I-191)</i>	Problem-solving	113 out of 152	74.34%
				Vindictive	36 out of 152	23.68%
Frustration alone	34 out of 205	16.59%	<i>I felt very frustrated as no one owned the problem nor recognized what it actually was or how it had happened (I-105)</i>	Problem-solving	30 out of 34	88.24%

			<i>Annoyed, disappointed. I expect a lot more for a big company like this. I tweeted them (I-30)</i>	Vindictive	4 out of 34	11.76%
Anger with frustration	86 out of 205	41.95%	<i>Angry upset and alone I didn't really get any help from anyone...I just wanted my car fixed I did everything that was asked of me but the dealer tried to intimidate me (I-7)</i>	Problem-solving	63 out of 86	73.26%
			<i>Anger at the courier for bit doing his job properly and lying, frustration at not being believed, and annoyed at the inconvenience to my life (I-63)</i>	Vindictive	23 out of 86	26.74%
Rage	23 out of 205	11.71%	<i>I was angry and upset, close to rage-tears (I-112)</i>	Problem-solving	16 out of 23	69.57%
			<i>Their attitude was appalling as they did not think that there was anything wrong with their system. After putting down the phone I was fuming. I lost my temper threatening to owe my money to another bank and going to the FCA (I-205)</i>	Vindictive	7 out of 23	30.43%
Rage alone	4 out of 205	1.95%	<i>I was furious as they treated me like an idiot, they weren't helpful ... and weren't overly helpful in trying to rectify the situation (I-51)</i>	Problem-solving	4 out of 4	100%
				Vindictive	-	-
Anger with rage	10 out of 205	4.88%	<i>I am furious and very angry I can't get anywhere with them and they keep making more mistakes (I-20)</i>	Problem-solving	7 out of 10	70%
			<i>I was fuming. I also felt upset. I knew I had to complain and let others know the poor service I received (I-195)</i>	Vindictive	3 out of 10	30%
Rage and frustration	1 out of 205	0.49%	<i>During the call I did come close to losing my temper...I was frustrated that such a simple process could be handled so badly (I-83)</i>	Problem-solving	1 out of 1	100%
				Vindictive	-	-

Table 3: Measurement model

<i>Constructs</i>	Study 2			Study 3		
	Mean	Standard Deviation	Standardized loadings	Mean	Standard Deviation	Standardized loadings
Perceived severity - Source: Grégoire et al. (2010) The experience described caused you... Study 2: CR= .95, AVE= .87; Study 3: CR= .81, AVE= .58						
(1) Minor problems – (7) Major problems	4.22	1.79	.93	3.92	1.87	.72
(1) Small inconveniences – (7) Big inconveniences	4.79	1.76	.94	4.39	2.05	.71
(1) Minor aggravation – (7) Major aggravation	5.04	1.64	.93	4.63	1.95	.86
Perceived unfairness (1= strongly disagree; 7= strongly agree) - Source: Grégoire et al. (2010) Study 2: CR= .87, AVE= .63; Study 3: CR= .91, AVE= .73						
I felt the behavior of the staff/company was unfair	5.32	1.79	.87	4.51	2.12	.88
I felt the behavior of the staff/company was unjust	5.23	1.81	.84	4.36	2.06	.91
I felt the behavior of the staff/company was dishonest	4.64	2.07	.73	3.85	2.12	.78
I felt cheated by the staff/company	5.21	1.77	.72	4.59	2.08	.83
Perceived blame (1= strongly disagree; 7= strongly agree) - Source: Grégoire et al. (2010) Study 2: CR= .94, AVE= .85; Study 3: CR= .96, AVE= .89						
Overall the company was responsible for the negative experience I went through	6.26	1.26	.94	5.98	1.50	.94
The negative experience was the company's fault	6.14	1.40	.96	5.91	1.60	.97
I would blame the company for what happened	6.14	1.40	.86	5.89	1.62	.90
Perceived negative motives (1= strongly disagree; 7= strongly agree) - Source: Grégoire et al. (2010) The company... Study 2: CR= .84, AVE= .57; Study 3: CR= .85, AVE= .59						
...was primarily motivated by my interests (1) – ...was primarily motivated by its interests (7)	3.82	2.09	.77	3.04	2.04	.81
...did not try to abuse me (1) – ...did try to abuse me (7)	5.28	1.94	.64	4.95	1.92	.70
...did not intend to take advantage of me (1) – ...intended to take advantage of me (7)	3.51	1.96	.76	2.81	1.84	.77
...the company had good intentions (1) – ...the company had bad intentions (7)	4.30	1.87	.83	3.74	1.82	.80
Supportive anger (1= not at all; 7= extremely) - Sources: Laros & Steenkamp (2005), Romani et al. (2012), Richins (1997) Study 2: CR= .92, AVE= .69; Study 3: CR= .83, AVE= .54						
Frustrated	6.26	1.20	.89	5.88	1.50	.81
Irritated	6.21	1.16	.86	5.93	1.44	.73
Annoyed	6.31	1.13	.64	6.01	1.42	.61
Disappointed	6.07	1.35	.87	5.82	1.44	.82

Anger	5.80	1.38	.73	5.15	1.91	.83
Mad	5.43	1.66	.78	4.91	1.98	.75
Vindictive anger (1= not at all; 7= extremely) - <i>Source: Shaver et al. (1987)</i>						
Study 2: CR= .96, AVE= .81; Study 3: CR= .92, AVE= .68						
Fury	4.50	2.09	.92	3.78	2.22	.82
Rage	4.51	2.05	.92	3.83	2.19	.85
Loathing	3.67	2.15	.86	3.11	2.12	.83
Vengefulness	2.85	1.99	.73	2.63	1.92	.73
Outrage	5.07	1.90	.81	4.38	2.09	.83
Problem-solving complaining (1= strongly disagree; 7= strongly agree) - <i>Source: Gelbrich (2010)</i>						
Study 2: CR= .81, AVE= .58; Study 3: CR= .86, AVE= .68						
...try to find a satisfactory solution for both parties	5.26	1.58	.73	5.52	1.39	.82
...work with the company to solve the problem	5.35	1.59	.80	5.53	1.51	.79
...constructively discuss what happened	5.19	1.62	.76	5.65	1.39	.86
Vindictive complaining (1= strongly disagree; 7= strongly agree) - <i>Source: Gelbrich (2010)</i>						
Study 2: CR= .84, AVE= .64; Study 3: CR= .77, AVE= .53						
... give a hard time to the company's representatives	2.62	1.66	.86	2.34	1.58	.91
... make someone from the firm pay for my negative experience	2.23	1.43	.84	2.07	1.38	.67
... be unpleasant with the representatives of the company	3.15	1.86	.70	2.88	1.77	.59

CR = Composite Reliability; AVE = Average Variance Extracted; * items dropped from the analysis because highly correlated with both facets of anger.

Table 4: Correlations

	X1	X2	X3	X4	X5	X6	X7	X8
Perceived severity (X1)	.78 ^{**} / .87							
Perceived blame (X2)	.29 ^{**} / .43 ^{**}	.92 / .94						
Perceived unfairness (X3)	.47 ^{**} / .58 ^{**}	.26 ^{**} / .40 ^{**}	.79 / .85					
Perceived negative motives (X4)	.67 ^{**} / .50 ^{**}	.35 ^{**} / .43 ^{**}	.42 ^{**} / .71 ^{**}	.75 / .77				
Supportive anger (X5)	.57 ^{**} / .66 ^{**}	.35 ^{**} / .48 ^{**}	.53 ^{**} / .66 ^{**}	.28 ^{**} / .49 ^{**}	.72 / .78			
Vindictive anger (X6)	.50 ^{**} / .61 ^{**}	.21 ^{**} / .31 ^{**}	.55 ^{**} / .64 ^{**}	.42 ^{**} / .51 ^{**}	.64 ^{**} / .68 ^{**}	.81 / .84		
Problem-solving complaining (X7)	.08 / .18 [*]	.09 / .21 ^{**}	.07 / .07	.16 ^{**} / .12	.23 ^{**} / .22 ^{**}	.07 / .03	.82 / .72	
Vindictive complaining (X8)	.23 ^{**} / .24 ^{**}	.09 / .18 ^{**}	.26 ^{**} / .29 ^{**}	.48 ^{**} / .22 ^{**}	.15 [*] / .23 ^{**}	.36 ^{**} / .37 ^{**}	-.09 / -.42 ^{**}	.73 / .71

Note: Latent variable correlations reported. The coefficients below the diagonal relate to Study 2/Study 3. ** indicates that the coefficient is significant at $p < .01$; * indicates that the coefficient is significant at $p < .05$. The square root of the AVE reported on the diagonal.

Table 5: Structural model estimates (Study 2 and 3)

Hypothesized path	Study 2		Study 3	
	Estimate not controlling for CMB	Estimate controlling for CMB	Estimate not controlling for CMB	Estimate controlling for CMB
Perceived blame → Supportive anger	.12*	.18*	.20**	.24**
Perceived blame → Vindictive anger	-.02	.03	.04	.02
Perceived severity → Supportive anger	.36**	.24**	.31**	.30**
Perceived severity → Vindictive anger	.28**	.27**	.30**	.25**
Perceived unfairness → Supportive anger	.48**	.31**	.39**	.28**
Perceived unfairness → Vindictive anger	.47**	.41**	.44**	.34**
Perceived negative motives → Supportive anger	.16*	.21**	.02	.03
Perceived negative motives → Vindictive anger	.01	.05	.07	.09
Supportive anger → Problem-solving complaining	.35**	.31**	.12*	.11*
Vindictive anger → Problem-solving complaining	-.17*	-.05	-.11*	-.13*
Supportive anger → Vindictive complaining	-.13*	-.12*	-.03	-.05
Vindictive anger → Vindictive complaining	.39**	.33**	.26**	.25**

Note: S2 = Study 2, S3 = Study 3. * $p < .05$, ** $p < .01$, *** $p < .001$. Standardized betas. In Study 2 gender has a positive influence on supportive anger ($\beta = .29, p < .01$) and age has a positive influence on problem-solving complaining ($\beta = .13, p < .05$). In Study 3, age ($\beta = -.13, p < .05$) and gender ($\beta = -.14, p < .05$) have a negative influence on supportive anger ($\beta = -.31, p < .05$). These significant differences remain significant when controlling for CMB. No other effects for the covariates are statistically significant.

Table 6: Indirect effects (Study 2 and 3)

Indirect effect	Study 2			Study 3		
	Estimate	LLCI	ULCI	Estimate	LLCI	ULCI
Perceived blame → Supportive anger → Problem-solving complaining	.02	-.001	.06	.03	.005	.08
Perceived severity → Supportive anger → Problem-solving complaining	.04	.02	.08	.05	.01	.11
Perceived severity → Vindictive anger → Vindictive complaining	.16	.08	.27	.12	.06	.21
Perceived unfairness → Supportive anger → Problem-solving complaining	.09	.04	.19	.05	.01	.10
Perceived unfairness → Vindictive anger → Vindictive complaining	.10	.06	.17	.09	.05	.15
Perceived negative motives → Supportive anger → Problem-solving complaining	.06	.03	.09	.01	-.04	.03

Note: LLCI = 95% Lower limit confidence interval, ULCI = 95% Upper limit confidence interval. Unstandardized betas.

Table 7: Amount of variance explained by the structural model (Study 2)

	Not controlling for CMB				Controlling for CMB			
	Supportive anger	Vindictive anger	Problem-solving complaining	Vindictive complaining	Supportive anger	Vindictive anger	Problem-solving complaining	Vindictive complaining
	%	%	%	%	%	%	%	%
Variance accounted for by the Emotional Appraisals	41	45	-	-	18	44	-	-
Variance accounted for by Supportive and Vindictive Anger	-	-	12	21	-	-	11	28

Table 8: Amount of variance explained by the structural model (Study 3)

	Not controlling for CMB				Controlling for CMB			
	Supportive anger	Vindictive anger	Problem-solving complaining	Vindictive complaining	Supportive anger	Vindictive anger	Problem-solving complaining	Vindictive complaining
	%	%	%	%	%	%	%	%
Variance accounted for by the Emotional Appraisals	50	59	-	-	15	25	-	-
Variance accounted for by Supportive and Vindictive Anger	-	-	11	14	-	-	10	11

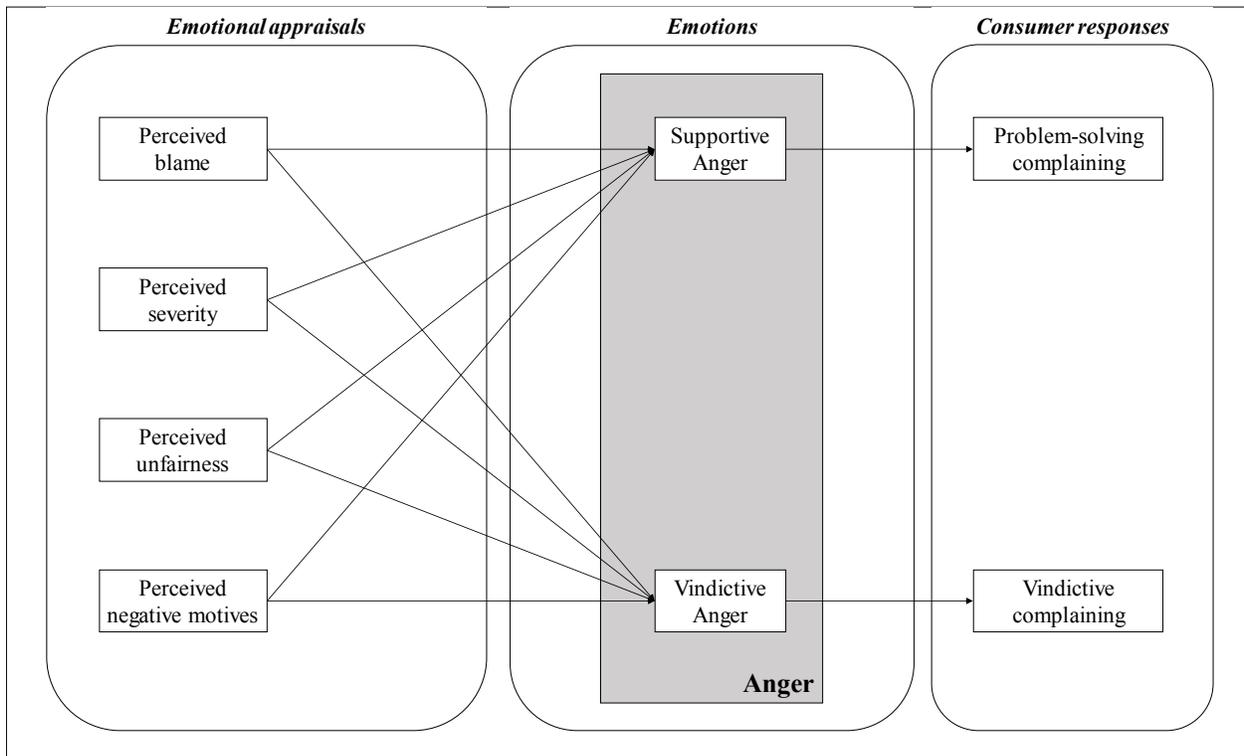


Figure 1: A conceptual model of the two facets of consumer anger