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Romani S., Grappi S., Dalli D. (2012). Emotions that Drive Consumers Away from Brands: Measuring Negative Emotions toward Brands and their Behavioral Effects. INTERNATIONAL JOURNAL OF RESEARCH IN MARKETING, vol. 29 (1), p. 55-67, <http://dx.doi.org/10.1016/j.ijresmar.2011.07.001>

which has been published in final form at:

<http://www.sciencedirect.com/science/article/pii/S0167811611000826>

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**Emotions that Drive Consumers Away from Brands:  
Measuring Negative Emotions toward Brands and their Behavioral Effects**

**Abstract**

Consumers' appraisals of brand-related stimuli originating from both marketer- and non-marketer-controlled sources of information may evoke negative emotional reactions toward certain brands. We derive a scale that includes six distinct brand-related negative emotions (anger, discontent, dislike, embarrassment, sadness, and worry). Studies 1 through 4 demonstrate that our scale achieves convergent and discriminant validity and provides superior insights and better predictions compared to extant emotion scales. Study 5 manipulates specific negative brand-related emotions and reveals that they predict particular behavioral outcomes (i.e., switching, complaining, and negative word of mouth).

Keywords: negative emotions; brand; consumer behavior

Research has largely ignored consumers' negative emotions in relation to brands, even though consumers increasingly consider the brand-related stimuli related to products and services when deciding what to consume and what not to. The premise that consumers experience strong negative emotions toward brands is interesting given that psychological theories on emotions (Frijda, Kuipers, & ter Schure, 1989; Roseman, Wiest, & Jose, 1994; Zeelenberg & Pieters, 2006) suggest that the nature of the emotion experienced has a highly determinant effect on an individual's subsequent actions. For example, in general, individuals who experience anger verbally attack the perceived cause of this state, thus actively seeking a solution. Like anger, fear encourages individuals to take action, but unlike anger, fear motivates them to flee from the fear-evoking stimulus and/or to avoid further confrontation (Roseman et al., 1994). Thus, consumers' anger toward a brand is likely to be predictive of their decision to complain (e.g., file written complaints) with the brand's parent company and/or to participate in campaigns against the company. On the other hand, fear may predict an unwillingness to try the brand or, if the consumer previously used the brand, the decision to switch to a competing brand. To date, there is no empirically tested measure of negative emotions experienced by consumers when exposed to brand-related stimuli originating from both marketer-controlled and non-marketer-controlled sources of information. Consequently, it is difficult for both researchers and marketing practitioners to understand the nature of these negative emotions and to predict possible negative consumer behaviors toward a brand.

In this paper, which builds on Zeelenberg and Pieters' (2006) "Feeling is for Doing" approach and recognizes that the utility of emotions resides in their possible effect on actions, we develop and test a comprehensive scale for measuring specific consumers' negative emotions toward brands. Such a scale is necessary to document consumers' negative reactions in order to

determine their nature, reliability, and construct validity. Moreover, a valid scale is a prerequisite for demonstrating that specific negative emotions are indeed predictive of behavior and, consequently, for a number of empirical and theoretical advancements with respect to emotions and related forms of behavior in a brand-related context.

### **1. Specific negative emotions and brands**

Scholars have examined specific negative emotions generated by products (Laros & Steenkamp, 2005; Nyer, 1997), services (Bougie, Pieters, & Zeelenberg, 2003; Soscia, 2007; Zeelenberg & Pieters, 1999; 2004), and purchase-related situations (Dahl, Manchanda, & Argo, 2001; Yi & Baumgartner, 2004). However, few have considered negative emotions toward brands. Although some brand research studies touch upon phenomena closely related to negative emotions and feelings (e.g., Dalli, Romani, & Gistri, 2006; Grant & Walsh, 2009), an explicit consideration of specific negative emotions toward brands and of the emotion-brand behavior link is still lacking in the literature.

In addition to product and service characteristics, consumers are constantly exposed to a variety of brand-related stimuli both from marketer-controlled sources of information and from other sources. First, consumers come into contact with brand elements (Keller, Apéria, & Georgson, 2008) such as the visual and verbal information that serves to identify and differentiate the brand. Consumers are also exposed to brand-related marketing activities (Brakus, Schmitt, & Zarantonello, 2009). In these activities, marketing communications that function as the voice of the brand, through which it attempts to make contact with consumers, play a fundamental role. Examples of non-marketer-controlled sources of information about brands to which consumers are exposed include information communicated by other commercial or non-partisan sources, word of mouth, and direct personal experiences, as well as anti-brand

websites. Finally, consumers autonomously link the brand with people, places, or other elements and consider these additional associations as brand-related stimuli when evaluating the brand (Keller, 2003).

We assume that consumers' appraisals of brand-related stimuli that are not directly related to product or service attributes and performance constitute the major sources of their negative emotional responses, referred to here as "negative emotions toward brands" (NEB). We thus conceptualize NEB as consumers' negative emotional reactions evoked by the appraisal of brand-related stimuli. These stimuli differ from product- or service-related attributes and functions and originate from both marketer-controlled and non-marketer-controlled sources of information.

In addition to irritation or annoyance experienced due to brand slogans (Rosengren & Dahlén, 2006), consumers may also feel distaste toward specific brands because of the undesirable image that the brand's symbolic meanings project (Hogg & Banister, 2001). Alternatively, the consumers can feel aversion toward a brand based on identification of that brand with its parent company if the latter is believed to disregard certain basic human rights (Kozinets & Handelman, 2004). Thus, our focus is on negative emotional reactions to brand-related stimuli not directly associated with the actual physical product or service or with the functions of that product that consumers seek. Although much of the earlier brand research concentrated on tangible, product-related information for brands, branding in recent years has increasingly been about more abstract, intangible, general considerations. These streams of research help to uncover overlooked or relatively neglected facets of consumer-brand knowledge that have significant theoretical and managerial implications (Keller, 2003).

However, to date, brand research has provided scant information on the negative emotional states that consumers experience in relation to brands. It is not known, for example, if consumers experience predominantly classical emotions such as dislike and anger or if they also experience such emotions as sadness, fear, and shame. Therefore, to identify the full range of negative emotions most frequently experienced in a brand-related context and to construct an appropriate scale for measuring these emotions, it is essential to focus on the common emotion-behavior links in brand-related situations. Consumer behavior scholars have based much of their work related to consumption-related emotions on the Consumption Emotions Set (CES) introduced by Richins (1997). Although this scale has proven useful in the contexts for which it was developed, its usefulness for the study of brand-related negative emotions is limited in several ways that are examined below.

## **2. CES and negative emotions toward brands**

The CES plays a central role in the assessment of consumption-related emotions. This scale contains a set of positive and negative descriptors that represent the range of emotions directly experienced by consumers when considering the purchase of a product/service, actually making the purchase, and consuming or using a product/service. Although this measure arguably captures the diversity of emotional states related to consumption experiences better than previous measures in consumer research (Izard, 1977; Plutchik, 1980) or advertising research (Batra & Holbrook, 1990; Edell & Burke, 1987), it is of limited relevance in this study due to the significant differences between negative emotions induced by consumption experiences in general and those arising exclusively in relation to brands.

First, it is unnecessary to consider purchase and actual consumption to assess the emotional states that brands elicit. In fact, some brand-elicited emotions are experienced

vicariously rather than directly: consumers may have negative reactions to certain brands of which they are aware but have never personally used. In turn, the nature of the negative emotions experienced toward a brand could partially differ from that of the negative descriptors included in the CES. Thus, the entire range of negative emotions resulting in an unwillingness to try a brand is excluded from the CES.

Second, the negative emotions included in the CES refer to a combination of different situations, actions, and stimuli related to both products and brands. For example, examining the emotions directly experienced during the actual purchase of a specific product requires considering not only the product and possibly the brand (in the case of a brand-focused purchase) but also the interaction with the store's physical environment, its personnel, and its policies and practices. In such circumstances, the events and the beliefs about actual or possible causes of these and other product or brand stimuli combine to elicit emotions. The emotional focus of this study is much more specific and limited. We focus on brand-related stimuli that consumers encounter and choose to appraise due to their relevance to the consumer's well-being (Bagozzi, Gopinath, & Nyer, 1999). In the case of direct experience with the brand, the emphasis is also on the brand, as such, and all of its properties rather than on the various consumption processes involved (such as shopping or usage). For example, together with the depiction of a brand's target market as communicated in brand advertising, consumers' own experiences and contacts with brand users can contribute to the formation of a brand-user image that may generate negative emotions toward the brand. However, all that matters for our purposes are the resulting general, unfavorable brand-related associations, not the specific incidents or negative experiences that may contribute to these associations. Given the difference in the referent of emotions, it is reasonable to suggest that the range of negative emotions elicited by brands is

more restricted than that elicited by specific consumption experiences. Furthermore, the range of the negative emotions elicited by brands differs partially in terms of the nature of the emotions involved. In fact, the presence of a broader range of emotion elicitors (as in consumption-related rather than brand-related experiences) can make these elicitors interdependent (Ben-Ze'ev, 2000), thus affecting the evaluative patterns and, in turn, the nature of the negative emotions experienced.

In addition, the CES was designed as a comprehensive measurement of the full range of emotional states associated with consumption in numerous contexts; consequently, it is not well suited for the task of addressing specific theoretical issues about negative emotions that are only relevant to brands and potential related emotion-behavior links. It is therefore apparent that the CES has significant shortcomings with respect to assessing negative emotions in relation to brands.

The empirical work presented in this paper is motivated by the desire to identify a more appropriate measure relevant to this issue. This measure's development is guided by the following objectives: to identify the range of negative emotions most frequently experienced toward brands; to measure these emotions with an acceptable level of reliability; and to test their effects on behavioral outcomes related to brands.

### **3. Consumers' conceptions of negative emotions toward brands**

Before turning to the development of the scale, we present the results of an explorative qualitative study designed to investigate the types of negative emotions that consumers may experience in relation to brands and the relevant brand-related stimuli that can generate these feelings. For these purposes, Italian consumers ( $n = 115$ ) were instructed to choose a brand that could generate negative emotional responses and to describe their negative emotions toward it,

providing a detailed account of their reasons for these emotions, on a single sheet of paper. The instructions clearly indicated that product or service attributes and performance should not be mentioned as the causes of negative emotions toward the brand. In addition, the survey made no mention of different types of consumption situations or their stages, ranging from anticipatory consumption to usage. This procedure was used in an attempt to focus the respondents' attention on the brand and, consequently, to uncover the negative emotions related to the abstract, intangible, and general aspects of the brand rather than the negative emotions related to the physical product or service and its consumption per se. Although these dimensions of brand knowledge are related, we believe that they can be distinct and, therefore, are separable. In addition, the participants had to rely on their own perceptions of negative emotions toward brands because they were not primed with specific related terms. Thus, this preliminary study first enabled a conservative assessment of whether consumers react in a way consistent with our conception of negative emotions related to brands. Second, we were able to determine if this type of instruction could focus the respondents' attention on brand-related stimuli not directly connected to product or service attributes and performance in specific consumption situations.

The majority of the participants provided open-ended responses for a wide variety of goods and service brands<sup>1</sup>. A total of 15% (n = 17) of the respondents were excluded because they described non-emotional responses such as indifference or disinterest. Two expert raters identified the emotion descriptors applicable to negative feelings toward brands that were expressed in each respondent's written report. The overall inter-rater agreement rate was 91%, with discrepancies resolved after discussion. The respondents used a total of 44 negative emotion descriptors. Those observed most often were angry (n = 15), irked (n = 15), feeling of dislike (n

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<sup>1</sup> Some of the selected brands were recently involved in a product-harm crisis (e.g., Nestlé in China). Although these events may "devastate a carefully nurtured brand equity" (Van Heerde, Helsen, & Dekimpe, 2007, p. 230), our respondents did not refer to these events, focusing more on general issues related to their brand knowledge.



= 15), sad (n = 11), disgusted (n = 9), feeling of hate (n = 9), nervous (n = 8), impatient (n = 7), feeling of distaste (n = 7), and irritated (n = 6). Very few of the most cited emotion descriptors (i.e., angry, sad, nervous, and irritated) are included in the CES. Impatient is incorporated only in the CES's extended version whereas irked is not included as a specific emotion descriptor but, rather, refers to the subcategory of anger in the CES. Furthermore, the remaining most cited emotion descriptors, such as feeling of dislike, disgust, feeling of hate, and feeling of distaste, are absent from the CES. In our opinion, and according to Ortony, Clore, and Collins's (1988) taxonomy, these absent descriptors refer to an emotion subcategory that was excluded from CES: dislike. Conversely, some emotion descriptors and emotion subcategories included in the CES (e.g., envy and guilt) do not appear in our data. Therefore, this preliminary qualitative study suggests that the measurement scales developed to examine emotions in multiple contexts related to consumption are inappropriate for capturing the types of emotions experienced in relation to brands.

In addition to the analysis of the emotion descriptors used in each respondent's report, the two raters coded the brand-related stimuli that generated negative emotions, distinguishing, when possible, between those originating from marketer- and non-marketer-controlled sources of information, from consumers' associations of brands with other relevant entities (e.g., companies, countries, spokespersons), and from a mix of these sources. Table 1 presents a selection of the respondents' descriptions. These examples reveal that, in line with our definition of NEB, the participants described all of the possible types of brand-related stimuli as sources of their negative emotions. Moreover, the respondents did not refer to specific incidents or experiences with a brand in their narratives; rather, they relied on more general and abstract brand-related information.

[Insert table 1 about here]

A final point worth noting is that almost all of the descriptions of the causes of negative emotions were related to brand stimuli different from typical negative product or service attributes and performance. This evidence supports the appropriateness of the selected procedures for the scope of this research.

In summary, this preliminary qualitative study provides us with the opportunity to better understand negative emotions toward brands and supports the need to identify a more appropriate instrument for measuring these emotions. We now turn our attention to the development of a reliable measurement instrument to empirically demonstrate specific associations between negative emotions and behaviors in a brand-related context.

#### **4. Developing the NEB scale**

Studies 1 and 2 develop the NEB scale; study 3 validates its internal consistency, defines its dimensional structure, and assesses its convergent and discriminant validity. Lastly, study 4 concludes the demonstration of the NEB's superiority in terms of predictive validity compared to the CES.

##### *4.1. Study 1*

This initial study aimed to identify a preliminary set of descriptors for the range of negative emotions that consumers experience toward brands. We asked 106 Italian undergraduate and graduate students (45% female, 55% male; all between 20 and 27 years of age) from a cross-section of majors to identify a brand capable of generating negative emotional responses, following the procedure illustrated above in the preliminary study<sup>2</sup>. In addition to the benefits for the scope of our research, this data collection methodology is characterized by brand

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<sup>2</sup> This procedure was used in all four studies. Study 5 was characterized by some differences in the procedure used, as illustrated in section 5.1.

heterogeneity across respondents, with references made to various brands that engender different types and degrees of negative emotions. Therefore, this methodology led to the selection of a set of items and then to the identification of a set of factors that cover the full range of possible negative feelings that consumers experience toward brands<sup>3</sup>.

The participants completed a survey comprising 106 negative emotion descriptors. The emotion descriptors spanned the range of negative emotions identified by the respondents in the qualitative exploratory study as well as those identified by other scholars (e.g., Laros & Steenkamp, 2005; Ortony et al., 1988). Given that the literature on this topic is essentially U.S.-based, the negative emotion descriptors were collected in English. These items were then translated into Italian using a double-back-translation method with independent translators (Brislin, 1980). The respondents used 7-point rating scales ranging from 1 (not at all) to 7 (very much) to describe the extent to which the selected brand made them feel each of the 106 emotion descriptors. Two versions of the questionnaire were prepared, one with the emotion descriptors in alphabetical order and the other in reverse, to control for possible order effects.

For this study, 73 brands were considered capable of generating negative emotion responses. The respondents mainly selected brands related to clothes and fashion accessories (37%), groceries (22%), cars (13%), and hi-fi/audio/video equipment (9%). Any emotion descriptor with a mean value above 2 on the 7-point scale was assumed to have significance. The remaining 87 negative emotion descriptors were subjected to maximum likelihood exploratory factor analysis with oblique rotation (promax). Any item with a factor loading greater than .50 on its focal factor and not higher than .25 on another was retained. Six different factors ( $\chi^2(165) = 202.4; p = .02$ ) were identified, containing 25 negative emotion descriptors in total, which were

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<sup>3</sup> It is important to note that similar results are unlikely to be obtained using alternative methods, such as asking respondents to report their negative responses to an individual, typically “controversial” brand, as this is likely to restrict the scope to certain negative emotions evoked by the selected brand.

then used in the subsequent study. The Cronbach's alphas of the six dimensions are sufficiently high, ranging from .71 to .86. The six factors account for 68.4% of the total variance, and each factor explains at least 5% of the total variance, fulfilling the minimal requirements presented by Netemeyer, Bearden, and Sharma (2003).

#### *4.2. Study 2*

The purpose of study 2 was to examine the structure of negative emotions toward brands and to refine this structure into a manageable number of valid emotions to create a general scale for use in research covering a wide range of brands. A total of 227 Italian students (47% female, 53% male; all between 19 and 28 years of age) enrolled in different undergraduate and graduate courses were asked to identify a brand capable of generating negative emotional responses. Using the same 7-point rating scale ranging from 1 (not at all) to 7 (very much), they then had to indicate the extent to which that brand made them feel each of the 25 emotion descriptors identified in the first study. Again, to control for possible order effects, two versions of the questionnaire were prepared: one with the emotion descriptors in alphabetical order and the other in reverse.

In this study, 146 different brands were considered capable of generating negative emotion responses. The respondents mainly selected brands related to clothes and fashion accessories (36%), groceries (23%), hi-fi/audio/video equipment (10%), and cars (8%). The negative emotion descriptors were subjected to maximum likelihood exploratory factor analysis with promax rotation. Any item with a factor loading greater than .50 on its focal factor and no loading higher than .25 on another factor was retained. Furthermore, items with mean ratings below 2 were eliminated. The final set reflected six factors ( $\chi^2(60) = 84.2, p = .02$ ) containing 18 negative emotion descriptors (see Table 2).

[Insert table 2 about here]

The factor labeled *dislike*<sup>4</sup> included items for feeling contempt, revulsion, and hate. These emotion descriptors imply consumers' rejection of the brand based on evaluations of unappealingness. The factor labeled *sadness* included items for heartbroken, sorrowful, and distressed. These reflect the unpleasant emotions consumers may experience toward a brand due to an undesirable outcome. The factor labeled *discontent* included items for dissatisfied, unfulfilled, and discontented, which describe consumers' negative feelings when their expectations are disconfirmed or not met. The factor labeled *anger* included items for indignant, annoyed, and resentful, reflecting the varying levels of intensity of the anger consumers feel toward a brand, usually due to a fairly specific cause such as provocation or a violation of principles. The factor labeled *worry* included items covering feeling threatened, insecure, and worried. These suggest that consumers consider a brand as potentially dangerous and/or threatening to themselves. Finally, the factor labeled *embarrassment* included items for feeling sheepish, embarrassed, and ridiculous, thus reflecting consumers' negative feelings regarding both the personal and social disadvantages associated with a brand.

A confirmatory factor analysis (CFA) confirmed the validity of our six factors ( $\chi^2(120) = 174.49$ ; NNFI = .93; CFI = .95; RMSEA = .04; SRMR = .05) (Lisrel, Jöreskog & Sörbom, 1996). The correlations between the dimensions obtained through the CFA are presented in Table 3. This descriptors set, referred to as NEB, is expected to adequately represent consumers' negative emotional reactions to brands. Some specific emotions that are usually important in

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<sup>4</sup> This factor's label was inspired by the concept of dislike presented by Ortony et al. (1988). These emotions are momentary reactions of dislike that Ortony et al. (1988) distinguishes from dispositional dislike, usually called negative attitudes. The latter can influence the former. People are more likely to experience momentary emotions of dislike toward particular objects if they have a dispositional dislike for the general categories to which the objects can be assigned. The central idea is that this group of emotions includes reactions of momentary dislike, but the unappealingness variable that drives them is based on dispositional dislike, and the two, despite interacting in important ways, clearly differ.

consumption contexts, such as guilt or envy, are not present in our scale. This absence can be explained in several ways. First, to keep the scale as short as possible, we excluded from the analyses the negative emotions that were less prominent in respondents' answers, including guilt and envy. However, the low prominence of these two negative emotions in our research context can be derived, as explained in section 2, from the specific referent of emotions considered in the NEB scale. Our focus on brand-related stimuli rather than on consumption-related situations can justify the absence of both guilt and envy from the NEB scale<sup>5</sup>.

[Insert table 3 about here]

#### 4.3. Study 3

*Objectives and method.* Study 3 was designed to confirm the NEB scale's stability using a different sample of respondents (ordinary consumers) and to assess the possible hierarchical relation among the first-order factors representing the construct of negative emotions toward brands; that is, the possibility of second-order factors was investigated. A multitrait-multimethod (MTMM) matrix analysis was performed to confirm the validity of our measures (Bagozzi & Edwards, 1998; Bagozzi & Yi, 1991; 1993; Bagozzi, Yi, & Philips, 1991), taking alternative measures from previous research on emotions in marketing and consumer behavior into consideration as different methods. We specifically included measures from the CES, and for the sake of comprehensiveness, we included measures from two other emotion scales frequently used in consumer research: Izard's (1977) DES-II scale and Havlena and Holbrook's (1986) adaptation of Plutchik's scale.

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<sup>5</sup> Feelings of guilt have been linked to compulsive buying (O'Guinn & Faber, 1989), to specific interactions with salespeople (Dahl, Honea, & Manchanda, 2005), and to the consumption of unethical products (Bray, Johns, & Kilburn, 2011). In all of these situations, consumers experience guilt when they appraise their bad consumption actions. A similar argument can be used with respect to envy. This is an emotion that can become prominent when actual consumption, imagined consumption, or even observed consumption by others is involved, as illustrated by Van de Ven, Zeelenberg, and Pieters (2010).

A total of 421 ordinary Italian consumers (49.6% male, 50.4% female; aged between 18 and 86 years, with a mean age of 42 years) were asked to recall a brand toward which they felt negative emotions and to complete the 18-item NEB scale with this brand in mind. In addition, to carry out the MTMM analysis, the questionnaire included negative emotion descriptors from the previously mentioned scales that were not included in the NEB scale. The respondents used a 7-point rating scale ranging from 1 (not at all) to 7 (very much) to quantify the extent to which the selected brand evoked the appropriate negative emotions.

In this study, 243 different brands were nominated as capable of generating negative emotional responses. The respondents mainly selected brands related to groceries (30%), clothes and fashion accessories (27%), cars (15%), and hi-fi/audio/video equipment (8%). There were no important differences in terms of brand and product category between the student and the ordinary consumer samples. This reduces the risk of effects on responses due to different brand and product categories that respondents referred to in the generation phase or validation process.

*Results.* Structural equation modeling was used to assess the scale items' relationships with the construct of negative emotions toward brands. Cronbach's alpha reliability coefficients for the measures were all satisfactory ( $\alpha > .70$ ). A CFA confirmed that the six factors were valid ( $\chi^2(120) = 285.86$ ; NNFI = .90; CFI = .92; RMSEA = .05; SRMR = .05). Table 4 presents the correlations between the dimensions (i.e., factors)<sup>6</sup>.

[Insert table 4 about here]

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<sup>6</sup> We also performed the likelihood ratio test (Anderson & Gerbing, 1988; Bollen, 1989) to confirm the NEB constructs' discriminant validity compared to the attitude toward the brand. The following items were used to measure attitude: bad-good, unpleasant-pleasant, low quality-high quality, worthless-valuable, useful-useless, unfavorable-favorable, disadvantageous-advantageous, negative-positive, unpleasant-pleasant, agreeable-disagreeable ( $\alpha = .88$ ). The likelihood ratio test, performed separately for each NEB factor and attitude, provides evidence for discriminant validity. The chi-square statistic that explicitly compares models suggests that the model without constriction is significantly better than models that hypothesize equality between the attitude toward the brand and the NEB factors (*attitude=anger*,  $\Delta\chi^2 = 88.84$ ; *df* = 1.  $\alpha < .05$ ; *attitude=dislike*,  $\Delta\chi^2 = 103.57$ ; *df* = 1.  $\alpha < .05$ ; *attitude=worry*,  $\Delta\chi^2 = 45.19$ ; *df* = 1.  $\alpha < .05$ ; *attitude=sadness*,  $\Delta\chi^2 = 6.14$ ; *df* = 1.  $\alpha < .05$ ; *attitude=embarrassment*,  $\Delta\chi^2 = 51.13$ ; *df* = 1.  $\alpha < .05$ ; *attitude=discontent*,  $\Delta\chi^2 = 4.4$ ; *df* = 1.  $\alpha < .05$ ).

Confirmatory factor analyses, including first- and second-order models, were then conducted to assess the relations among scale items. The fit statistics of each model were subsequently examined to assess the model that best fits the data. The findings revealed that model 1 – with all 18 items loaded directly on a single latent construct – was not acceptable ( $\chi^2(135) = 1415.2$ ; NNFI = .41; CFI = .48; RMSEA = .15; SRMR = .12); nor was model 2, with six equally weighted first-order latent factors and no correlations allowed between them, reflecting a single second-order factor. The goodness-of-fit tests for the latter model suggested a relatively weak representation:  $\chi^2(129) = 347.69$ ; NNFI = .88; CFI = .89; RMSEA = .06; SRMR = .07.

Considering the results from the confirmatory factor analysis, correlation data, and theoretical arguments, we decided to investigate a third model that aggregates factors forming our construct based on agency as a key appraisal capable of predicting a wide range of emotions. Indeed, to date, evidence suggests that agency and outcome desirability are the two primary drivers of emotion (Maheswaran & Chen, 2006; Ruth, Brunel, & Otnes, 2002; Smith & Ellsworth, 1985). As observed by Watson and Spence (2007), agency-related appraisals have the greatest effect on the specific emotions that will emerge from the desirable/undesirable emotion group. Causal agency refers to the source of control over the stimulus event. The appraiser may perceive the agent as him- or herself, someone else, or even an external circumstance (Ortony et al., 1988; Roseman, Antoniou, & Jose, 1996; Smith & Ellsworth, 1985). Furthermore, agency is regarded as more relevant in situations involving negative rather than positive emotions (Peeters & Czapinski, 1990), particularly in response to failure, because unexpected or negative are more likely than positive or expected events to generate attempts to explain possible causes (Folkes, 1988; Weiner, 2000). In this situation, the emotion descriptors included in the embarrassment



factor can be regarded as being elicited by events brought about by oneself; those included in the anger and dislike factors are due to events caused by someone or something else; and lastly, those included in the sadness and worry factors are brought about by events caused by external circumstances. The discontent dimension requires specific comments. In contrast to the other specific negative emotions, relatively little is known about the nature and experience of discontent. In general, research in psychology (e.g., Ortony et al., 1988; Scherer, 1994) and marketing (e.g., Bougie et al., 2003; Nyer, 1998) converges on considering the emotion descriptors in this category as relatively undifferentiated emotions; that is, general valenced reactions to negative events. In addition, Weiner (1986) depicts this emotion group as outcome-dependent emotions because they are associated with the undesirability of an event, not with its cause. Specific evidence for this conceptualization in a marketing context is provided by Bougie et al. (2003), who show that feelings of dissatisfaction resulting from service failures are distinct from more specific negative emotions (anger, in this specific study) that may arise after attempts to determine why the service failure occurred. This conceptualization suggests that we should treat discontent in the model as a specific negative emotion separate from the other cause-related negative emotions (Roseman et al., 1996). Moreover, the special nature of discontent may also suggest a possible explanation for the low correlations with the more differentiated negative emotions<sup>7</sup>. Therefore, in terms of model design, it is possible to assume six first-order latent factors (anger, dislike, embarrassment, worry, sadness, and discontent), four of which reflect two second-order factors (NEB<sub>1</sub> and NEB<sub>2</sub>) (model 3) (see Figure 1). This model's goodness-of-fit is satisfactory:  $\chi^2(136) = 309.84$ ; NNFI = .90; CFI = .91; RMSEA = .05; SRMR = .06.

[Insert figure 1 about here]

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<sup>7</sup> Although the discontent factor presents low correlations with the other factors, we decided to retain it in the following analyses because it contributes to the content of the scale, as suggested by Rossiter (2002) and Vandecasteele and Geuens (2010).

In model 3, anger and dislike, and sadness and worry, are first-order factors that correspond to two higher-order constructs, whereas embarrassment and discontent are distinct negative emotions at the first-order level. Likelihood ratio tests show that the four constructs in model 3 (discontent, embarrassment, NEB<sub>1</sub>, and NEB<sub>2</sub>) are distinct dimensions<sup>8</sup>.

An analysis of a MTMM matrix was then carried out to confirm construct validity using the following alternative measurement scales: the NEB scale and measures from Richins' (1997) CES scale, Havlena and Holbrook's (1986) adaptation of Plutchik's scale, and Izard's (1977) DES-II scale as two methods (see below). Consequently, we were able to assess construct validity, estimating and adjusting for random error and method variance influences. Given the lack of alternative measures available to form an indicator for the second method of the discontent dimension, we eliminated it from this analysis. The discontent dimension, in fact, is only present in the CES scale with two items that correspond to two of the three items included in our NEB scale; therefore, it is not possible to include this dimension in the current analysis. The CFA for the MTMM consists of five traits (anger, dislike, embarrassment, worry, and sadness) and two methods (the NEB scale as method 1 and measures selected from Richins' (1997) CES scale, Havlena and Holbrook's (1986) adaptation of Plutchik's scale, and Izard's (1977) DES-II scale as method 2). All participants in the sample responded to all of the items in both methods. The selected measures comprising the factors in method 2 are: irritated, angry, hostile, and enraged for anger; disgusted and disdainful for dislike; ashamed, humiliated, and shy for embarrassment; scared, afraid, and fearful for worry; as well as sad, miserable, and downhearted for sadness.

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<sup>8</sup> Chi-square difference tests of each correlation show that NEB<sub>1</sub> and NEB<sub>2</sub> are distinct ( $\Delta\chi^2(1) = 133.37, p < .05$ ), as are NEB<sub>1</sub> and embarrassment ( $\Delta\chi^2(1) = 516.99, p < .05$ ), NEB<sub>2</sub> and embarrassment ( $\Delta\chi^2(1) = 144.41, p < .05$ ), discontent and embarrassment ( $\Delta\chi^2(1) = 391.32, p < .05$ ), NEB<sub>1</sub> and discontent ( $\Delta\chi^2(1) = 495.74, p < .05$ ), and NEB<sub>2</sub> and discontent ( $\Delta\chi^2(1) = 273.56, p < .05$ ).

As previously mentioned, all three measurement scales were used for greater completeness and because the CES scale is incapable of covering all of the traits included in the NEB scale. In addition, specific measures were selected from each of the three competing scales based on an evaluation of the items that could best map our traits. The CFA model of MTMM fits the data very well:  $\chi^2(14) = 19.82, p = .14$ ; NNFI = .99; CFI = 1.00; RMSEA = .03; SRMR = .02. To confirm that both trait and method factors are necessary to explain the variance in the measures, we compared this model with the trait-only model. The comparison of the two models indicated that the introduction of method factors shows significant improvements over the trait-only model ( $\Delta\chi^2(\Delta df = 11) = 58.6, p < .01$ ). Therefore, we used the trait-method-error model to test construct validity. Trait variance was used to indicate the degree of convergent validity (Widaman, 1985), and all factor loadings for traits proved to be statistically significant, ranging from moderate to high in magnitude. The random error variances ranged from very low to moderate in magnitude, as did the method variance. Overall, the convergent validity of the NEB scale measures was demonstrated. Furthermore, all traits achieved discriminant validity because the correlation plus 2 standard errors between each pair was less than 1.00 at the .05 level of significance.

*Discussion.* Study 3 presents a NEB scale structure based on two higher-order constructs (anger–dislike and sadness–worry) and embarrassment and discontent as single, specific emotions. We acknowledge that the two composite, higher-order constructs resulting from second-order factor analysis may be unique to how responses were generated in the present study and that, in any given context, consumers may or may not exhibit second-order representations of their negative emotions toward brands. In other words, it is possible that, in certain situations, people experience strong worry but weak sadness or strong anger but weak dislike and so on.

Nevertheless, it is possible to use our items to measure all of these reactions because the NEB scale can be employed to represent emotional responses as first-order factors if desired. In addition, the higher-order constructs, although empirically and theoretically relevant, are nevertheless formed by individual emotions that, despite sharing a degree of similarity in terms of appraisal (Roseman et al., 1996), differ substantially with regard to experiential content (Roseman et al., 1994). Accordingly, these individual emotions were treated separately in the final part of this research, which utilizes specific negative emotions toward brands to predict specific forms of consumer behavior.

Furthermore, study 3 supports the construct validity of the NEB measures when compared to the other relevant scales in the literature. Thus, the need to create a specific set of emotion descriptors that can be used to assess negative emotions toward brands has been met.

#### *4.4. Study 4*

*Objectives and method.* This study was designed to examine the predictive validity of the NEB in comparison to the CES. Because the NEB scale was specifically developed to measure negative emotions toward brands, it should be superior to the CES – a consumption emotion scale – in explaining relevant forms of consumer behavior related to brands. Specifically, we compare the ability of the NEB and the CES scales to effectively predict three forms of subsequent behavior, namely, complaining, switching, and word of mouth communication. Vandecasteele and Geuens (2010) used a similar procedure to demonstrate the predictive validity of their motivated consumer innovativeness scale.

We collected data from a sample of 146 ordinary Italian consumers (50% male, 50% female; aged between 18 and 69 years, with a mean age of 30 years). They were asked to recall a brand toward which they felt negative emotions and to complete the items on the NEB scale and

the negative items on the CES scale with this brand in mind. The respondents used 7-point rating scales ranging from 1 (not at all) to 7 (very much) to describe the extent to which the selected brand made them feel each of the different emotion descriptors presented in the questionnaire. The items that belong to both the NEB and CES scales were measured only once; in total, the subjects completed 37 negative emotion descriptors. In addition, the questionnaire included the following measures.

*Brand switching.* Brand switching was measured with a 3-item, adapted subset of Bougie et al.'s (2003) scale ( $\alpha = .76$ ). The respondents completed a 7-point agreement scale ranging from 1 (not at all) to 7 (very much) for the items "I bought this brand less frequently than before," "I switched to a competing brand," and "I stopped buying this brand and I will not buy it anymore in the future."

*Negative word of mouth.* Negative word of mouth was measured using an adaptation of Bougie et al.'s (2003) scale ( $\alpha = .95$ ). The respondents completed a 7-point agreement scale to address the following questions: "I said negative things about this brand to other people," "I discouraged friends and relatives to buy this brand", and "I recommended not to buy this brand to someone who seeks my advice."

*Complaining.* Complaining was measured using a subset of Zeelenberg and Pieters' (2004) scale ( $\alpha = .89$ ). A 7-point agreement scale was used to address the following questions: "I complained to external agencies (e.g., consumer unions) about the brand," "I complained to the company that produces the brand," and "I filled written complaints to the company that produces the brand."

*Results.* In separate analyses of each scale, the variables of the three forms of behavior were used to form the dependent variable set, while the subscales of the NEB measure and,

separately, the subscale of the CES formed the predictor variable set. The resulting  $R^2$  and chi-square values of these sets of regression analyses are shown in Table 5.

[Insert table 5 about here]

Although the NEB scale is formed by six factors and the CES scale by nine, the results show that the NEB scale is superior in representing the variance of the relevant outcomes of switching and negative word of mouth. With respect to these two types of behavior and compared to the CES, the NEB can account for a greater part of the variance. With respect to complaining behavior, the NEB and CES scales appear not to differ in capturing the variance of the outcome. The CES scale less adequately predicts switching and negative word of mouth, accounting for less than 20% of the variance, whereas the NEB scale explains 28% and 33%, respectively, of the variances of each of these behavioral responses.

*Discussion.* Study 4 confirms the superiority of the NEB scale over the CES when their predictive ability is considered regarding relevant negative forms of consumer behavior related to brands. Therefore, we conclude that the NEB scale shows incremental validity (Netemeyer, Bearden, & Sharma, 2003) over the CES. Having demonstrated that the new scale provides superior insights and better predictions than extant scales, especially the CES, in the next study, we focus our attention on the NEB scale to test important theoretical issues regarding specific negative emotions relevant to brands and the relative emotion-behavior links in brand-related contexts.

## **5. Study 5: Using specific negative emotions included in the NEB scale to predict consumer behavior**

In study 5, we focus on the three key behavioral outcomes: switching, negative word of mouth, and complaining. On the basis of prior studies in psychology and consumer research, we

expect that specific negative emotions included in the NEB scale affect these behavioral outcomes in different ways.

First of all, we note that not all emotions are clearly associated with well-defined actions. This is best exemplified by sadness, which is typically defined in terms of inactivity or the absence of any well-defined type of activity (Izard & Ackerman, 2000; Mattsson, Lemmink & McColl, 2004; Shaver, Schwartz, Kirson & O'Connor, 1987). Hence, we expect that sadness is not likely to have a significant effect on consumers' negative behavioral responses to brands.

A similar argument can be used for discontent. This is a consumer's general valenced reaction to a negative event that normally motivates him or her to find out the reason for what has happened and to examine who or what is responsible, but not to immediately act (Bougie et al., 2003). Therefore, we expect that discontent will have no significant effect on consumers' negative behavioral responses to brands.

As for the other emotional responses to brands, we maintain that the "feeling is for doing" perspective is applicable and, accordingly, assign actions to emotions based primarily on previous psychological research (e.g., Bougie et al., 2003; Frijda et al., 1989; Oatley & Jenkins, 1996; Roseman et al., 1994; Shaver et al., 1987). Specifically, we predict that worry will have a significant (positive) influence on switching because this emotion is commonly found to be a response to perceived threats to oneself (Oatley & Jenkins, 1996), rousing individuals to action and especially motivating people to flee from a situation in an effort to avoid dangerous outcomes. In brand-related contexts, worry should therefore lead to brand switching.

We also predict that anger will have a significant (positive) influence on complaining, given that this emotion generally elicits the opposite reaction of worry. Although both worry and anger clearly activate individuals, only the latter motivates them to actively seek a solution to the

situation (Roseman et al., 1994; Shaver et al., 1987; Stephens & Gwinner, 1998) by attacking or lashing out at the source of the anger. Consequently, in brand-related contexts, anger is expected to lead to complaining.

Likewise, we can predict that dislike will have a significant (positive) influence on both negative word of mouth and switching because individuals wish to distance themselves from, reject, express their disapproval of, or be disassociated from someone or something they dislike (Roseman et al., 1994). Thus, in brand-related contexts, dislike is likely to lead to both negative word of mouth as a way of expressing disapproval of or disassociation from the brand and to switching as a means of rejecting a previously used brand.

Finally, we expect embarrassment to have a significant (negative) influence on complaining because, in the presence of this emotion, individuals tend to turn inward and avoid contact with others (Roseman et al., 1994). We conclude, therefore, that embarrassment is likely to inhibit complaining.

### *5.1 Method*

We collected data from a sample of ordinary Italian consumers to address issues of generalizability and external validity. We conducted a study using 1217 individuals (47% male, 53% female; aged between 18 and 89, with a mean age of 41). We developed a “recalled emotion” condition for each of the six negative emotions that the NEB scale measures. For each of these, the respondents were asked to identify a brand that evoked the assigned negative emotion in them. For example, if the recalled emotion condition was dislike, the respondents were asked to take a few minutes to identify a brand they disliked. They were then asked to recall reasons for the negative emotion related to this brand as vividly as possible before providing written, open-ended responses to questions about the brand. This procedure



encouraged recollection of brand knowledge prior to completing the questionnaire<sup>9</sup>. For a similar procedure, see Roseman, Spindel, and Jose (1990). The respondents then completed the items of the NEB scale with this brand in mind. In addition, to demonstrate that specific negative emotions have different consequences for consumers' negative behavioral responses toward brands, the questionnaire included the same measures used in study 4 for switching ( $\alpha = .81$ ), negative word of mouth ( $\alpha = .93$ ), and complaining ( $\alpha = .75$ ).

## 5.2 Results

Table 6 shows the mean values of the emotions experienced by the six recalled emotion conditions. The diagonal entry is the highest number in each of the table's rows and columns. This means that a given experienced emotion was highest in its corresponding recalled emotion condition (e.g., dislike was experienced to a higher degree in the recalled emotion condition dislike than in the other recalled emotion conditions). An ANOVA analysis was conducted to compare each of the experienced emotions among the six recalled emotion conditions: dislike,  $F(5, 1210) = 222.29, p < .001$ ; anger,  $F(5, 1211) = 157.55, p < .001$ ; sadness,  $F(5, 1209) = 137.43, p < .001$ ; worry,  $F(5, 1210) = 351.44, p < .001$ ; embarrassment,  $F(5, 1210) = 448.56, p < .001$ ; and discontent,  $F(5, 1210) = 192.17, p < .001$ . In addition, for a given recalled emotion condition, the targeted emotion was always the significantly dominant experienced emotion (Table 7). For example, in the case of the dislike recalled emotion condition, we compared the mean of dislike with the means of the other negative emotions experienced within the same condition using the t-test statistic (e.g.,  $M(\text{dislike}) = 6.16$  vs.  $M(\text{anger}) = 4.38$ ;  $t = -16.55, p < .001$ ). Overall, these findings demonstrate that the recall instructions were, to a significant

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<sup>9</sup> Two expert raters coded the descriptions of the reasons that the respondents generated for the negative emotions that they reported. Almost all of them provided causes of negative emotions related to brand stimuli other than product or service failures. They usually relied on general and abstract brand-related information, providing abstractions of specific consumption situations. This additional evidence confirms the selected procedure's validity for our research scope.

degree, successful in stimulating the retrieval of brands that could elicit the targeted emotions. Table 8 displays the mean values of the three behavioral measures used to assess the predictive validity of the recalled emotion conditions. The F-values assessed the statistical significance of differences in consumers' negative behavioral responses toward the brand across all of the recalled emotion conditions.

[Insert tables 6, 7 and 8 about here]

Having demonstrated that the recall instructions have a significant effect on emotions and behaviors, the next step was to verify whether the effects on behaviors are really due to the mediating role of negative emotions. Consequently, a step-down analysis was employed using MANOVA (Bagozzi & Yi, 1989; Bagozzi, Yi, & Singht, 1991). Two groups were created for each recalled emotion condition: group 1 corresponded exclusively to the specific condition, while group 2 included all other conditions. Table 9 summarizes the results of this analysis. Step 1 was a regular MANOVA, with experienced emotion and negative behavioral responses as dependent variables. The results show that recall instructions have a significant effect on these variables. In step 2, the negative behavioral responses were the dependent variables, with the specific emotion used as a covariate. For example, for the dislike condition, in step 1, an omnibus test rejected equal means for all of the negative behavioral responses (complaining,  $F = 11.25, p < .001$ ; negative word of mouth,  $F = 48.77, p < .001$ ; switching,  $F = 28.64, p < .001$ ); therefore, they were tested with the variance due to the remaining dependent variable (e.g., experienced dislike) partialled out as a covariate. In step 2, a non-significant omnibus test signaled that the negative behavioral responses do not significantly differ across groups after controlling for the specific experienced negative emotion (complaining,  $F = .24, p = .62$ ; negative word of mouth,  $F = 2.70, p = .10$ ; switching,  $F = .17, p = .68$ ). Therefore, the

differences in behavioral responses are wholly due to their functional relations with the specific emotions considered<sup>10</sup>.

[Insert Table 9 about here]

The results are largely consistent with our expectations because all of the effects we predicted were significant. In addition, the results indicated a further influence that was not anticipated. In the first stage of the worry condition's step-down analysis, the omnibus test indicated that the rejection of equal means was not possible regarding complaining ( $F = 1.40, p = .24$ ) and negative word of mouth ( $F = 2.68; p = .10$ ); therefore, these behavioral responses were not considered in step 2. Furthermore, the difference in switching was entirely due to the effect of the experienced emotion of worry ( $F = .01, p = .94$ ). In the anger condition, the difference in complaining was entirely due to the specific effect of anger ( $F = 2.59, p = .11$ ), and the same relation was observed in a negative direction in the embarrassment condition ( $F = 2.54, p = .11$ ). In the case of the dislike condition, the difference in all three negative consumer behavioral responses to brands – complaining, negative word of mouth, and switching – was due to the functional relationships between these forms of behavior and dislike (complaining,  $F = .24, p = .62$ ; negative word of mouth,  $F = 2.70, p = .10$ ; switching,  $F = .17, p = .68$ ). Here, in addition to demonstrating the predicted influences on switching and negative word of mouth, dislike also appeared to be related to complaining. Because dislike involves an expression of disapproval,

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<sup>10</sup> Situations where the recalled instructions are still significant for some behavioral responses after controlling for the indirect effect through the specific experienced emotion (e.g., negative word of mouth in the case of experienced anger) can be explained in at least two ways. A first one is that the recall conditions may simply have an automatic direct effect on behavioral responses. However, this explanation is unlikely to be correct because such an effect would be difficult to explain without affective mediation, especially because appraisal can be unreflective, automatic, and unconscious (Frijda, 1986; 1993; Lazarus, 1991; Scherer, 1984; 1993). A second, and more plausible, explanation is that the specific experienced emotion may indeed be a partial mediator of the outcomes and that there may be additional mediators (e.g., other experienced negative emotions that can co-occur) that were not assessed in the present analysis (Zhao, Lynch, & Chen, 2010). These additional mediators may contribute to the measured outcomes.

this relation appears to be consistent. Finally, in both the sadness and the discontent conditions, these emotions were not regarded as wholly affecting any differences in behaviors.

### *5.3 Discussion*

The pattern of the relations is largely consistent with our general expectation that specific negative emotions could affect specific behavioral outcomes related to brands in different ways. All of the predicted influences for specific emotions were confirmed by the data, while an additional unanticipated influence that emerged from the analysis did not prove problematic in light of our general assertion concerning the relation between emotions and specific actions.

The study confirms the inactive nature of sadness, which has been noted in previous research (Izard & Ackerman, 2000; Mattsson et al., 2004; Shaver et al., 1987). Feeling sad about brands leads consumers to talk very little, if at all, about their experience, and they make no effort to improve their circumstances or to re-establish a positive relationship with the brand. A similar inactive response is observed for discontent, confirming results from previous marketing research (Bougie et al., 2003). Worry primarily leads to brand switching, whereas anger elicits a contrary reaction and induces complaining. Consistent with previous related consumer research, our results reveal that the active nature of anger makes it an apt antecedent of complaining behavior. As demonstrated by, among others, Folkes, Koletsky, and Graham (1987), Casado-Diaz and Mas-Ruiz (2002), and Bougie et al. (2003), anger is often present in a complaint situation when responsibility for a failure can be attributed to a company, particularly regarding factors that the company can control. However, unlike previous research, our study found no evidence that negative word of mouth is wholly due to anger. With regard to embarrassment, it is interesting to observe that this specific emotion implies passivity in consumers, somewhat similar to sadness. Furthermore, the reduced complaining compared to the other emotions is

wholly due to its relation with embarrassment. We can therefore affirm that embarrassment inhibits complaining. Lastly, dislike motivates action (Storm & Storm, 1987), and in the presence of dislike toward brands, it is apparent that consumers are oriented toward different possible forms of negative behavior toward the brands.

## **6. General discussion**

Negative emotions play an important role in consumers' relationships with brands. We developed an 18-item NEB scale that represents the range of negative emotions consumers most frequently experience toward brands. The set of derived emotions can be broken down into six negative emotions (anger, dislike, embarrassment, worry, sadness, and discontent), which various brands evoke differently. The NEB scale proved to be consistent internally as well as across samples and studies; the convergent and discriminant validity was demonstrated by using the MTMM matrix analysis and by comparing other relevant measures available in the marketing and consumer behavior literature. In addition, we demonstrated that the new scale provides superior insights and better predictions than the CES scale and other extant scales do. Lastly, evidence was provided that, consistent with theory, diverse negative emotions toward brands lead to different behavioral consequences. The results of study 5 indicate that focusing on distinctive emotions increases insight into consumers' behavior when they are exposed to brands that elicit negative feelings. Recent studies (Bonifield & Cole, 2007; Bougie et al., 2003; Nyer, 1997; Soscia, 2007; Zeelenberg & Pieters, 2004) reveal that specific negative emotions have differential effects on customer behavioral responses to service failures. We were able to reconfirm and extend these findings by revealing the distinctive effects of six negative emotions on consumer responses to brands. In particular, and in line with previous research, we demonstrated the inactive nature of both sadness and discontent and the positive relationship between anger

and complaining. Further, our examination of worry, embarrassment, and dislike toward brands revealed new, interesting evidence for brand-related research as well as an understanding of the differential roles that specific negative emotions play. Worry about a brand is positively associated with switching. This finding is in line with basic research in the field of psychology (among others, see Frijda et al., 1989; Roseman et al., 1994) because this type of behavior is similar to those action tendencies naturally induced by emotional feelings clustered under the label of fear, such as escaping, evading, and seeking safety from a potential threat. We also demonstrated the inhibiting effect of embarrassment on customer complaining and/or a general failure to take any form of action other than avoidance. This effect can be explained by the fact that individuals usually feel embarrassed by their behavior, not by a brand (Storm & Storm, 1987). Consequently, although negative actions against brands are less likely in this case, different types of remedial actions aimed at maintaining or restoring a desired personal or social identity without involving the brand's substitution, could well emerge. For example, as also reported in a qualitative study by Grant and Walsh (2009) on brand-related embarrassment, a number of respondents described how they had covered up, removed, or concealed brand logos to avoid potential embarrassment.

Finally, the emotion response of dislike merits particular attention. Dislike is a negative affective reaction to brands based on evaluations of unappealingness, which are, in turn, dependent on personal attitudes and tastes (Ortony et al., 1988). Despite having received little attention in previous marketing or consumer behavior research, dislike can be seen to activate consumers, leading to various types of possible negative behavioral responses to brands. In sum, given their different effects on consumers' behavioral responses, our results confirm the

importance of focusing on specific emotions and, more generally, demonstrate that negative emotions play an incontrovertible role in influencing consumers' actions.

### *6.1 Managerial implications*

This research has practical relevance for marketing and brand managers confronted with the difficulties of managing their brands. Specifically, this research may assist in several specific domains. The NEB scale identifies specific negative emotions toward brands, thus providing a brand-specific tool for assessment and tracking purposes, and it is also valuable in terms of predictive validity. That is, practitioners can use it to examine behaviors arising from brand-evoked negative emotions. In the event that these forms of behavior warrant consideration, the results of the scale used can be valuable for developing appropriate countermeasures. For example, our results, consistent with previous research (for an extensive review, see Bonfrer, 2010), demonstrate that consumers are generally more likely to switch to other brands or engage in negative word of mouth than they are to seek redress by filing a complaint. Because it does not give the parent company the opportunity to address the problem, this consumer tendency may be detrimental to sales and profits, thus necessitating remedial actions by the parent company. The social sharing of experiences in new media settings is exemplary in this regard. Although it is difficult for managers to address all negative consumer sentiments, our results suggest that it may be more important to address certain types of negative emotions and their antecedents because they are more likely to be shared.

Moreover, companies could use this scale to assess consumers' negative emotions toward competitive brands. By identifying competing brands that could be used as "enemies" (e.g., Japanese motorcycle brands vs. the Italian manufacturer, Ducati), a company could provide its customers with important new components of its brand. In addition, the company could use these

components as important elements for oppositional brand loyalty (Muniz & O'Guinn, 2001; Thompson & Sinha, 2008), thus reducing the likelihood that its customers will purchase products from competing brands.

### *6.2 Research limitations and further research*

These results must be tempered by a number of caveats. First, one limitation of this study is its reliance on self-reported measures of emotions and behaviors, which may restrict the conclusions that can be drawn from the findings. Although supportive evidence for actions was found in both Studies 4 and 5, it is important that differences in behavior between the emotions constituting the NEB scale be clearly and directly observed in the future. Second, although our findings imply that specific negative emotions affect consumers' behavioral responses toward brands, our results do not imply that these emotions are the only drivers of such reactions. Evaluative judgments related to brands' and/or consumers' individual characteristics and personalities could also play an important role in causing negative outcomes (e.g., Soderlund & Rosengren, 2007, on word of mouth).

We would welcome extensions of the present studies that examine the stability and validity of the NEB scale across cultures. We also recommend that future research examine the scale's ability to predict behavioral responses that were not investigated here. In particular, based on our research, we expect that, given the active nature of dislike and anger, they affect the forms of protest used against brands, such as boycotting or anti-brand protests on web sites. Likewise, given the social nature of brands, we expect embarrassment to lead to the propensity to refrain from displaying certain brands in public. Furthermore, it would be interesting to determine whether specific negative emotions in the NEB scale are related to the dimensions of brand personality (Aaker, 1997), which, if true, would make the identification of such dimensions very



closely connected and relevant. In addition to future work utilizing the NEB scale, we recommend further research on the experiential dimension of specific negative emotions and the antecedent states related to brands. For instance, it would be useful to understand what it means to feel angry with or sad about brands and to identify the conditions that create these emotions. Research by emotion theorists (Ben-Ze'ev, 2000; Ortony et al., 1988) may serve as a useful starting point. Finally, additional studies could examine both negative and positive emotions. In particular, it could prove interesting to investigate the concept of emotional ambivalence when a consumer experiences both kinds of emotions toward certain brands. What happens in these situations? Which of the polarized emotions most influences behavior? Could the strongest emotion cancel out the effects of any other emotion, or is it simply prioritized in terms of action, with the less intense emotions influencing behavior at a later date? An exploration of these issues could extend our understanding of negative emotions toward brands.

**Acknowledgements**

Sincere thanks are due to Rick Bagozzi for his insightful advice and support. The authors would also like to thank the editor, the area editor, and the two anonymous reviewers for their useful comments and suggestions. Finally, the authors gratefully acknowledge the financial support of the Agence Nationale de la Recherche (BLAN06-3\_134656).

## References

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34 (3), 347-356.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Bagozzi, R. P., & Edwards, J. R. (1998). A general approach for representing constructs in organizational research. *Organizational Research Methods*, 1 (1), 45-87.
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27 (2), 184-206.
- Bagozzi, R. P., & Yi, Y. (1989). On the use of structural equation models in experimental design. *Journal of Marketing Research*, 26 (3), 271-284.
- Bagozzi, R. P., & Yi, Y. (1991). Multitrait-multimethod matrices in consumer research. *Journal of Consumer Research*, 17 (4), 426-439.
- Bagozzi, R. P., & Yi, Y. (1993). Multitrait-multimethod matrices in consumer research: Critique and new developments. *Journal of Consumer Psychology*, 2 (2), 143-170.
- Bagozzi, R. P., Yi, Y., & Philips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 36 (3), 421-458.
- Bagozzi, R. P., Yi, Y., & Singht, S. (1991). On the use of structural equation models in experimental designs: Two extensions. *International Journal of Research in Marketing*, 8 (2), 125-140.
- Batra, R., & Holbrook, M. B. (1990). Developing a typology of affective responses to advertising. *Psychology & Marketing*, 7 (1), 11-25.
- Ben-Ze'ev, A. (2000). *The subtlety of emotions*. Cambridge, MA: MIT Press.

- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Bonfrer, A. (2010). The effect of negative word-of-mouth in social networks. In S. H. K. Wuyts, M. G. Dekimpe, E. Gijsbrechts, and R. Pieters (Eds.), *Connected customer. The changing nature of consumer and business markets* (pp. 307-336). Taylor & Francis, Inc.
- Bonifield, C., & Cole, C. (2007). Affective responses to service failure: anger, regret and retaliatory versus conciliatory responses. *Marketing Letters*, 18 (1/2), 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 in services. *Journal of the Academy of Marketing Science*, 31 (4), 377-393.
- Bray, J., Johns, N., & Kilburn, D. (2011). An Exploratory Study into the Factors Impeding Ethical Consumption. *Journal of Business Ethics*, 98 (4), 597-608.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How do we measure it? And does it affect loyalty?. *Journal of Marketing*, 73 (3), 52-68.
- Brislin, R. W. (1980). Translation and content analysis of oral and written materials. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of cross-cultural psychology* Vol. 2 (pp.389-444). Boston: Allyn & Bacon.
- Casado-Diaz, A.B., & Mas-Ruiz, F. J. (2002). The consumer's reaction to delays in service. *International Journal of Service Industry Management*, 13 (2), 118-140.
- Dahl, D. W., Honea, H., & Manchanda, R. V. (2005). The Rs of interpersonal consumer guilt: relationship, reciprocity, reparation. *Journal of Consumer Psychology*, 15 (4), 307-315.
- Dahl, D. W., Manchanda, R. V., & Argo, J. J. (2001). Embarrassment in consumer purchase: the roles of social presence and purchase familiarity. *Journal of Consumer Research*, 28 (3), 473-481.

- Dalli, D., Romani, S., & Gistri, G. (2006). Brand dislike: representing the negative side of consumer preferences. *Advances in Consumer Research*, 33, 87-95.
- Edell, J. A., & Burke, M. C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14 (3), 421-433.
- Folkes, V. S. (1988). Recent attribution research in consumer behavior: a review and new directions. *Journal of Consumer Research*, 14 (4), 548-65.
- Folkes, V. S., Koletsky, S., & Graham, J. L. (1987). A field study of causal inferences and consumer reaction: the view from the airport. *Journal of Consumer Research*, 13 (4), 534-39.
- Frijda, N. H. (1986). *The emotions*. Cambridge: Cambridge University Press.
- Frijda, N. H. (1993). The place of appraisal in emotion. *Cognition & Emotion*, 7, 357-387.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal and emotional action readiness. *Journal of Personality and Social Psychology*, 57 (2), 212-28.
- Grant, I., & Walsh, G. (2009). Exploring the concept of brand embarrassment: the experience of older adolescents. *Advances in Consumer Research*, 36, 218-224.
- Havlena, W. J., & Holbrook, M. B. (1986). The varieties of consumption experience: comparing two typologies of emotion in consumer behavior. *Journal of Consumer Research*, 13 (3), 394-404.
- Hogg, M. K., & Banister, E. N. (2001). Dislikes, distastes and the undesired self: conceptualizing and exploring the role of the undesired end state in consumer experience. *Journal of Marketing Management*, 17 (1/2), 73-104.
- Izard, C. E. (1977). *Human emotions*. New York: Plenum Press.

- Izard, C. E., & Ackerman, B. P. (2000). Motivational, organizational, and regulatory functions of discrete emotions. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 253-264). New York: The Guilford Press.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8, User's reference guide*. Lincolnwood, IL: Scientific Software International.
- Keller, K. L. (2003). Brand synthesis: the multidimensionality of brand knowledge. *Journal of Consumer Research*, 29 (4), 595-600.
- Keller, K. L., Apéria, T., & Georgson, M. (2008). *Strategic brand management: a European perspective*. Essex: Pearson Education.
- Kozinets, R. V., & Handelman, J. M. (2004). Adversaries of consumption: consumer movements, activism, and ideology. *Journal of Consumer Research*, 31 (3), 691-704.
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford: Oxford University Press
- Laros, F. J. M., & Steenkamp, J. E. M. (2005). Emotions in consumer behavior: a hierarchical approach. *Journal of Business Research*, 58 (10), 1437-1445.
- Maheswaran, D., & Chen, C. Y. (2006). Nation equity: incidental emotions in country-of-origin effects. *Journal of Consumer Research*, 33 (3), 370-376.
- Mattsson, J., Lemmink, J., & McColl, R. (2004). The effect of verbalized emotions on loyalty in written complaints. *Total Quality Management & Business Excellence*, 15 (7), 941-958.
- Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 24 (4), 412-432.
- Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures. Issues and applications*. Thousand Oaks, California: Sage Publications.

- Nyer, P. U. (1997). A study of the relationships between cognitive appraisals and consumption emotions. *Journal of the Academy of Marketing Science*, 25 (4), 296-304.
- Nyer, P. U. (1998). The effects of satisfaction and consumption emotion on actual purchasing behavior. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 11, 62-68.
- Oatley, K., & Jenkins, J. M. (1996). *Understanding emotions*. Cambridge, MA: Blackwell.
- O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research*, 16 (2), 147-157.
- Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.
- Peeters, G., & Czapinski, J. (1990). Positive-negative asymmetry in evaluations: the distinction between affective and informational negativity effects. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology*. Vol. 1 (pp. 33-60). Chichester UK: Wiley.
- Plutchik, R. (1980). *Emotion: a psychoevolutionary synthesis*. New York: Harper & Row.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24 (2), 127-146.
- Roseman, I. J., Antoniou, A. A., & Jose, P. E. (1996). Appraisal determinants of emotions: constructing a more accurate and comprehensive theory. *Cognition and Emotion*, 10 (3), 241-277.
- Roseman, I. J., Spindel, M. S., & Jose, P. E. (1990). Appraisal of emotion-eliciting events: testing a theory of discrete emotions. *Journal of Personality and Social Psychology*, 59 (5), 899-915.

- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67 (2), 206-21.
- Rosengren, S. & Dahlén, M. (2006). Brand-slogan matching in a cluttered environment. *Journal of Marketing Communications*, 12 (4), 263-279.
- Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19 (4), 305–335.
- Ruth, J. A., Brunel, F. F., & Otnes, C. C. (2002). Linking thoughts to feelings: investigating cognitive appraisals and consumption emotions in a mixed-emotions context. *Journal of the Academy of Marketing Science*, 30 (1), 44-58.
- Scherer, K. R. (1984). On the nature and function of emotions: A component process approach. In K. R. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 293–317). Hillsdale, NJ: Erlbaum.
- Scherer, K. R. (1993). Neuroscience projections to current debates in emotion psychology. *Cognition & Emotion*, 7, 1–41.
- Scherer, K. R. (1994). Emotion as a Multi-Component Process. In P. Shaver (Ed.), *Review of Personality and Social Psychology: Emotions, Relationships, and Health*. Vol. 5 (pp. 37-63). Beverly Hills, CA: Sage.
- 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 (6), 1061-1086.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisals in emotion. *Journal of Personality and Social Psychology*, 48 (4), 813-838.



- Soderlund, M., & Rosengren, S. (2007). Receiving word of mouth from the service customer: an emotion-based effectiveness assessment. *Journal of Retailing and Consumer Services*, 14 (2), 123-136.
- Soscia, I. (2007). Gratitude, delight, or guilt: the role of consumers' emotions in predicting post consumption behaviors. *Psychology & Marketing*, 24 (10), 871-894.
- Stephens, N., & Gwinner, K. (1998). Why don't some people complain? A cognitive-emotive process model of consumer complaint behavior. *Journal of the Academy of Marketing Science*, 26 (3), 172-189.
- Storm, C., & Storm, T. (1987). A taxonomic study of the vocabulary of emotions. *Journal of Personality and Social Psychology*, 53 (4), 805-816.
- Thompson, S. A., & Sinha, R. K. (2008). Brand communities and new product adoption - The influence and limits of oppositional loyalty. *Journal of Marketing*, 72 (November), 65-80.
- Vandecasteele, B., & Geuens, M. (2010). Motivated consumer innovativeness: Concept, measurement, and validation. *International Journal of Research in Marketing*, 27 (4), 308-318.
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2010). The envy premium in product evaluation. *Journal of Consumer Research*, 37 (6), 984-998.
- Van Heerde, H., Helsen, K., & Dekimpe, M. G. (2007) "The impact of a product-harm crisis on marketing effectiveness," *Marketing Science*, 26 (2), 230-245.
- Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behavior: a review and integrative cognitive appraisal theory. *European Journal of Marketing*, 41 (5/6), 487-511.
- Weiner, B. (1986). *An Attributional Theory of Motivation and Emotion*. New York: Springer-Verlag.

- Weiner, B. (2000). Attributional thoughts about consumer behavior. *Journal of Consumer Research*, 27 (3), 382-87.
- Widaman, K. F. (1985). Hierarchically nested covariance structure models for multitrait-multimethod data. *Applied Psychological Measurement*, 9 (1), 1-26.
- Yi, S. & Baumgartner, H. (2004). Coping with negative emotions in purchase-related situations. *Journal of Consumer Psychology*, 14 (3), 303-317.
- Zeelenberg, M., & Pieters, R. (1999). Comparing service delivery to what might have been. Behavioral responses to regret and disappointment. *Journal of Service Research*, 2 (1), 86-97.
- Zeelenberg, M., & Pieters, R. (2004). Beyond valence in customer dissatisfaction: a review and new findings on behavioral responses to regret and disappointment in failed services. *Journal of Business Research*, 57 (4), 445-55.
- Zeelenberg, M., & Pieters, R. (2006). Feeling is for doing. A pragmatic approach to the study of emotions in economic behavior. In D. De Cremer, M. Zeelenberg, & J. K. Murnighan (Eds.), *Social Psychology and Economics* (pp. 117-137). London: Routledge.
- Zhao, X., Lynch, J.G. Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37 (August), 197-206.

**TABLE 1****Brand-related stimuli capable of generating negative emotions**

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**Brand-related stimuli from marketer-controlled sources of information**

- The brand-name is ridiculous, as are the logo and slogan; I don't like anything about this brand (f, 23)
- This is a brand that I consider as not representing me at all! A brand for showgirl types!! Think about its ads and endorsers (f, 21)

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**Brand-related stimuli from non marketer-controlled sources of information**

- I hate this brand. I also read a newspaper article recently about its brand personality and values and I really don't understand how they can continue using these old-fashioned ideas and narratives (f, 41)
- I feel disgust toward this brand! Have you ever tried passing in front of one of its outlets? The smell is terrible! I could never go in!! (m, 35).

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**Brand-related stimuli from consumers' associations of brands with other relevant entities (companies, countries, spokespersons, etc.)**

- I hate the exploitation and total lack of ethics that are behind every one of this brand's products (f, 20)
  - I really hate McDonald's because of its business practices... I also participate in web groups against it! It's a useful way to express my negative feelings...(m, 35)
-

TABLE 2

## Study 2 – negative emotion dimensions revealed by exploratory factor analysis

Items	Components					
	Dislike	Sadness	Discontent	Anger	Worry	Embarrassment
Feeling of contempt	<b>.88</b>	.15	.04	.48	.18	.04
Feeling of revulsion	<b>.87</b>	.26	.04	.35	.16	.06
Feeling of hate	<b>.86</b>	.22	.08	.43	.22	.04
Heartbroken	.20	<b>.87</b>	.21	.31	.33	.27
Sorrowful	.13	<b>.82</b>	.06	.30	.20	.24
Distressed	.25	<b>.75</b>	.07	.17	.33	.32
Dissatisfied	.01	.11	<b>.87</b>	.20	.02	.04
Unfulfilled	.04	.06	<b>.83</b>	.22	.05	.15
Discontented	.08	.16	<b>.80</b>	.21	.16	-.01
Indignant	.42	.32	.24	<b>.85</b>	.21	.00
Annoyed	.40	.19	.28	<b>.82</b>	.10	.11
Resentful	.31	.24	.08	<b>.70</b>	.18	.16
Threatened	.19	.27	.06	.18	<b>.85</b>	.07
Insecure	.12	.15	.14	.11	<b>.73</b>	.31
Worried	.15	.39	-.02	.17	<b>.71</b>	.11
Sheepish	.03	.26	.12	.09	.25	<b>.87</b>
Embarrassed	.07	.30	-.01	.11	.10	<b>.85</b>
Ridiculous	-.01	.40	.13	.28	.38	<b>.52</b>
<i>Eigenvalues</i>	2.90	3.01	2.35	2.93	2.44	2.15
<i>Cronbach's <math>\alpha</math></i>	.84	.78	.79	.70	.69	.68

**Bold** values indicate the factor on which each item predominantly loads.

**TABLE 3****Study 2 – correlations between dimensions (std errors)**

	Dislike	Sadness	Discontent	Worry	Anger	Embarrassment
Dislike	1.00					
Sadness	.28** (.07)	1.00				
Discontent	.05 (.08)	.19* (.08)	1.00			
Worry	.26** (.08)	.39** (.08)	.06 (.08)	1.00		
Anger	.61** (.06)	.39** (.07)	.32** (.08)	.26** (.08)	1.00	
Embarrassment	.10 (.08)	.46** (.07)	.09 (.09)	.25** (.09)	.16* (.09)	1.00

\* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

**TABLE 4****Study 3 – correlations between dimensions (std errors)**

	Dislike	Sadness	Discontent	Worry	Anger	Embarrassment
Dislike	1.00					
Sadness	.34** (.06)	1.00				
Discontent	.04 (.06)	.02 (.06)	1.00			
Worry	.39** (.06)	.49** (.06)	.01 (.06)	1.00		
Anger	.75** (.04)	.36** (.06)	.03 (.06)	.47** (.06)	1.00	
Embarrassment	.20** (.06)	.46** (.06)	-.01 (.06)	.25** (.06)	.17** (.06)	1.00

\* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

**TABLE 5****Study 4 – ability of NEB and CES scales to account for variance in relevant consumer****behaviors related to brands**

	CES	NEB	Likelihood ratio test
	R <sup>2</sup> ; chi-square (df)	R <sup>2</sup> ; chi-square (df)	$\Delta$ chi-square (df); <i>p</i>
Complaining	.24; 51.11 (9)	.25; 48.37 (6)	.75 (3); $\alpha > .05$
Negative WOM	.14; 64.29 (9)	.33; 30.26 (6)	34.03 (3); $\alpha < .05$
Switching	.18; 39.26 (9)	.28; 29.06 (6)	10.02 (3); $\alpha < .05$

TABLE 6

**Study 5 – means and ANOVAs of the experienced emotions among the different recalled emotion conditions**

Experienced emotions	Recalled emotion conditions						F-value, <i>p</i> .	Effect size $\eta_p^2$
	Dislike ( <i>N</i> = 226)	Anger ( <i>N</i> = 203)	Sadness ( <i>N</i> = 165)	Worry ( <i>N</i> = 203)	Embarrassment ( <i>N</i> = 177)	Discontent ( <i>N</i> = 243)		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
Dislike	<b>6.16<sub>a</sub></b> (.89)	3.70 <sub>b</sub> (1.74)	2.29 <sub>d</sub> (1.54)	3.02 <sub>c</sub> (1.53)	2.20 <sub>d</sub> (1.29)	2.84 <sub>c</sub> (1.54)	F(5, 1210) = 222.29, <i>p</i> < .001	.48
Anger	4.38 <sub>b</sub> (1.62)	<b>5.86<sub>a</sub></b> (1.16)	2.31 <sub>e</sub> (1.65)	3.30 <sub>d</sub> (1.54)	2.43 <sub>e</sub> (1.31)	3.50 <sub>c</sub> (1.61)	F(5, 1211) = 157.55, <i>p</i> < .001	.40
Sadness	1.94 <sub>b</sub> (1.25)	2.07 <sub>b</sub> (1.43)	<b>5.00<sub>a</sub></b> (1.64)	2.20 <sub>b</sub> (1.51)	1.90 <sub>b</sub> (1.23)	1.84 <sub>b</sub> (1.22)	F(5, 1209) = 137.43, <i>p</i> < .001	.36
Worry	1.88 <sub>b</sub> (1.23)	2.01 <sub>b</sub> (1.40)	1.99 <sub>b</sub> (1.22)	<b>5.92<sub>a</sub></b> (1.10)	2.10 <sub>b</sub> (1.23)	1.84 <sub>b</sub> (1.19)	F(5, 1210) = 351.44, <i>p</i> < .001	.59
Embarrassment	1.78 <sub>b</sub> (.99)	1.66 <sub>b</sub> (.95)	1.77 <sub>b</sub> (1.13)	1.69 <sub>b</sub> (1.15)	<b>5.84<sub>a</sub></b> (1.20)	1.69 <sub>b</sub> (1.02)	F(5, 1210) = 448.56, <i>p</i> < .001	.65
Discontent	3.54 <sub>c</sub> (1.90)	4.02 <sub>b</sub> (1.74)	1.96 <sub>e</sub> (1.43)	3.12 <sub>c</sub> (1.76)	2.67 <sub>d</sub> (1.66)	<b>6.33<sub>a</sub></b> (.96)	F(5, 1210) = 192.17, <i>p</i> < .001	.44

ANOVAs were performed on each experienced emotion among the different recalled emotion conditions. The means with different subscripts differ significantly (Tukey post-hoc test). The higher experienced emotion is indicated with (a). **Bold** values are the highest experienced emotion condition coefficients in the corresponding recalled emotion condition.



TABLE 7

**Study 5 – means and t-test statistics of the experienced emotions by recalled emotion conditions**

Experienced emotions	Recalled emotion conditions											
	Dislike (N = 226)		Anger (N = 203)		Sadness (N = 165)		Worry (N = 203)		Embarrassment (N = 177)		Discontent (N=243)	
	Mean (SD)	(t) p	Mean (SD)	(t) p	Mean (SD)	(t) p	Mean (SD)	(t) p	Mean (SD)	(t) p	Mean (SD)	(t) p
Dislike	<b>6.16</b> (0.89)	(.00) p = 1.00	3.70 (1.74)	(-17.70) P < .001	2.29 (1.54)	(-24.86) p < .001	3.02 (1.53)	(-27.05) p < .001	2.20 (1.29)	(-37.54) p < .001	2.84 (1.54)	(-35.39) p < .001
Anger	4.38 (1.62)	(-16.55) p < .001	<b>5.86</b> (1.16)	(.00) p = 1.00	2.34 (1.65)	(-22.86) p < .001	3.00 (1.54)	(-27.04) p < .001	2.49 (1.34)	(-33.33) p < .001	3.50 (1.61)	(-27.46) p < .001
Sadness	1.95 (1.30)	(-48.95) p < .001	2.05 (1.46)	(-37.37) p < .001	<b>5.28</b> (1.59)	(.00) p = 1.00	2.44 (1.53)	(-32.32) p < .001	1.86 (1.22)	(-43.49) p < .001	1.84 (1.22)	(-57.33) p < .001
Worry	1.88 (1.23)	(-52.27) p < .001	2.01 (1.40)	(-39.20) p < .001	1.99 (1.22)	(-34.59) p < .001	<b>5.92</b> (1.11)	(.00) p = 1.00	2.10 (1.23)	(-40.30) p < .001	1.84 (1.19)	(-58.67) p < .001
Embarrassment	1.78 (.99)	(-66.58) p < .001	1.66 (.95)	(-63.06) p < .001	1.77 (1.13)	(-39.80) p < .001	1.69 (1.15)	(-52.34) p < .001	<b>5.84</b> (1.21)	(.00) p = 1.00	1.69 (1.02)	(-70.75) p < .001
Discontent	3.54 (1.90)	(-20.69) p < .001	4.02 (1.74)	(-15.04) p < .001	1.96 (1.43)	(-29.83) p < .001	3.12 (1.76)	(-22.66) p < .001	2.67 (1.66)	(-25.42) p < .001	<b>6.33</b> (.96)	(.00) p = 1.00

T-test statistics of the experienced emotions are performed within each recalled emotion condition. **Bold** values are the highest experienced emotion condition coefficients in the corresponding recalled emotion condition.

**TABLE 8****Study 5 – means of the measures used to assess predictive validity**

Behavioral responses	F-value, <i>p</i> .	Effect size $\eta_p^2$	Recalled emotion conditions (mean, SD)					
			Dislike	Anger	Sadness	Worry	Embarrassment	Discontent
Complaining	F(5, 1208) = 17.16 <i>p</i> < .001	.17	1.65 <sub>b</sub> (1.29)	2.11 <sub>a</sub> (1.61)	1.18 <sub>b</sub> (.78)	1.47 <sub>b</sub> (1.05)	1.16 <sub>b</sub> (0.55)	1.70 <sub>b</sub> (1.37)
Negative WOM	F(5, 1207) = 65.63 <i>p</i> < .001	.21	5.50 <sub>a</sub> (1.75)	5.18 <sub>a</sub> (1.86)	2.57 <sub>c</sub> (2.05)	4.45 <sub>b</sub> (2.11)	3.12 <sub>c</sub> (2.04)	4.59 <sub>b</sub> (1.89)
Switching	F(5, 875) = 41.20 <i>p</i> < .001	.19	5.87 <sub>a</sub> (1.54)	5.24 <sub>a</sub> (1.92)	2.91 <sub>c</sub> (2.12)	5.16 <sub>b</sub> (1.97)	3.56 <sub>c</sub> (2.30)	5.44 <sub>a</sub> (1.86)

ANOVAs were performed on each behavioral response among the different recalled emotion conditions. The means with different subscripts differ significantly (Tukey post-hoc test). The higher behavioral response is indicated with (a).

TABLE 9

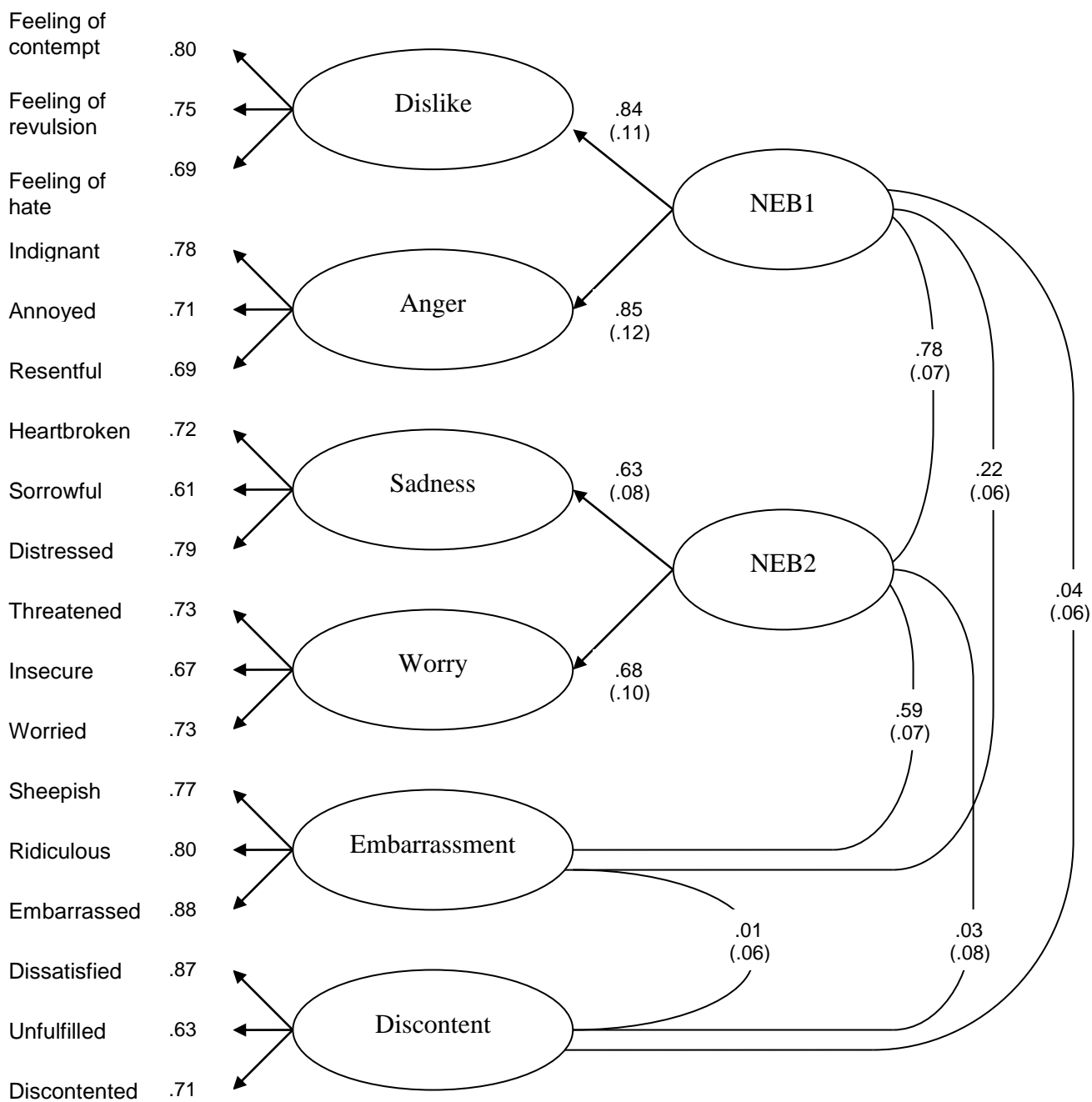
## Study 5 – step-down analyses

	Dependent Variable	F-value	<i>p</i>
<b>Dislike condition</b>			
Step 1	Complaining	11.25	.00
	Negative WOM	48.77	.00
	Switching	28.64	.00
	Dislike	503.53	.00
Step 2 Covariate: experienced dislike	Complaining	.24	.62
	Negative WOM	2.70	.10
	Switching	.17	.68
<b>Anger condition</b>			
Step 1	Complaining	29.81	.00
	Negative WOM	24.32	.00
	Switching	5.12	.02
	Anger	352.77	.00
Step 2 Covariate: experienced anger	Complaining	2.59	.11
	Negative WOM	13.33	.00
	Switching	7.62	.01
<b>Sadness condition</b>			
Step 1	Complaining	16.96	.00
	Negative WOM	107.63	.00
	Switching	91.15	.00
	Sadness	317.94	.00
Step 2 Covariate: experienced sadness	Complaining	16.31	.00
	Negative WOM	123.19	.00
	Switching	74.87	.00
<b>Worry condition</b>			
Step 1	Complaining	1.40	.24
	Negative WOM	2.68	.10
	Switching	5.07	.04
	Worry	1327.41	.00
Step 2* Covariate: experienced worry	Switching	.01	.94
<b>Embarrassment condition</b>			
Step 1	Complaining	21.77	.00
	Negative WOM	57.62	.00
	Switching	58.90	.00
	Embarrassment	1759.18	.00
Step 2 Covariate: experienced embarrassment	Complaining	2.54	.11
	Negative WOM	34.83	.00
	Switching	22.63	.00
<b>Discontent condition</b>			
Step 1	Complaining	.00	.96
	Negative WOM	2.22	.14
	Switching	21.45	.00
	Discontent	490.81	.00
Step 2* Covariate: experienced discontent	Switching	12.96	.00

\* Within worry and discontent conditions, complaining and negative word of mouth were removed from the analyses in step 2.

FIGURE 1

**Confirmatory factor analysis**  
 (the model hypothesizes six first-order factors explained by two second-order factors, labeled NEB<sub>1</sub> and NEB<sub>2</sub>; measurement error terms omitted for simplicity)



$\chi^2(136) = 309.84$ ; NNFI = .90; CFI = .91; RMSEA = .05; SRMR = .06