Survey relationship between the emotions of consumption and customer satisfaction of food products in Kurdistan province

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Abstract
One of the main topics in modern marketing is investigation emotions of consumption and pressure of costumers to purchase of produce goods and have satisfaction for customers. Based of this study investigates relationship between the emotions of consumption and customer satisfaction of food products in Kurdistan province. To access this aims 384 person are selected as sample. In this study dimension the emotions of consumption are logical emotion, sustainable emotion and cognitive emotion and customer satisfaction are measured based of for dimension such as quality, access, applied and sustainability. This study based of goal is applied and base of gathering data is deceptive study. The results of this study are indicated the emotions of consumption for products are good. Sensation dimension have the most average and among dimension of satisfaction access dimension has a good position. Also there is positive and meaningful correlation between emotion of consumption and customer satisfaction. 

Keywords: Consumer emotions; logical emotion, sustainable emotion, cognitive emotion, customer satisfaction, produces goods

1. Introduction
After a long period in which consumers were assumed to make largely rational decisions based on utilitarian product attributes and benefits, in the last two decades, marketing scholars have started to study emotions evoked by marketing stimuli, products and brands (Holbrook and Hirschman, 1982). Many studies involving consumer emotions have focused on consumers’ emotional responses to advertising (e.g., Derbaix, 1995), and the mediating role of emotions on the satisfaction of consumers (e.g., Phillips and Baumgartner, 2002). Emotions have been shown to play an important role in other contexts, such as complaining (Stephens and Gwinner, 1998), service failures (Zeelenberg and Pieters, 1999) and product attitudes (Dube et al., 2003). Emotions are often conceptualized as general dimensions, like positive and negative affect, but there has also been an interest in more specific emotions. Within the latter stream of research, some researchers use
a comprehensive set of specific emotions (Richins, 1997; Ruth et al., 2002). Other researchers concentrate on one or several specific emotions, such as surprise (e.g., Derbaix and Vanhamme, 2003), regret (e.g., Inman and Zeelenberg, 2002; Tsiros and Mittal, 2000), sympathy and empathy (Edson Escalas and Stern, 2003), embarrassment (Verbeke and Bagozzi, 2003) and anger (Bougie et al., 2003; Taylor, 1994).

Despite this emerging body of research, progress on the use of emotions in consumer behavior has been hampered by ambiguity about two interrelated issues, viz., the structure and content of emotions (Bagozzi et al., 1999).

First, with regard to structure, some researchers examine all emotions at the same level of generality (e.g., Izard, 1977), whereas others specify a hierarchical structure in which specific emotions are particular instances of more general underlying basic emotions (Shaver et al., 1987; Storm and Storm, 1987). Second, and elatedly, there is debate concerning the content of emotions. Should emotions be most fruitfully conceived as very broad general factors, such as pleasure/arousal (Russell, 1980) or positive/negative affect (Watson and Tellegen, 1985)? Alternatively, appraisal theorists (see, e.g., Frijda et al., 1989; Roseman et al., 1996; Smith and Lazarus, 1993) argue that specific emotions should not be combined in broad emotional factors, because each emotion has a distinct set of appraisals. The confusion concerning structure and content of emotions has hindered the full interpretation and use of emotions in consumer behavior theory and empirical research (Bagozzi et al., 1999).

The purpose of our paper is twofold. First, we integrate seemingly opposing research streams in psychology and consumer behavior by developing a hierarchical model of consumer emotions. We will show that the general dimensions with positive and negative affect are the superordinate and most abstract level at which emotions can be defined. The subordinate level consists of specific consumer emotions. We will develop an intermediate level with basic emotions that links these two levels. Second, we conduct a preliminary test of this proposed structure and compare the means for positive and negative affect with those of the basic emotions for four different food types.

2. Emotions in consumer research
This section will briefly discuss an illustrative set of consumer studies on emotions. Several studies focused on the emotional responses to ads. Holbrook and Batra (1987) developed their own emotional scale based on an in-depth review of the literature. They uncovered a pleasure, arousal and domination dimension in their data, and showed that these emotions mediate consumer responses to advertising. Edell and Burke (1987) also created their own emotion list and found that feelings
play an important role in the prediction of the ad’s effectiveness. They proposed three factors: an upbeat, negative, and warmth factor. Olney et al. (1991) showed that the emotional dimensions pleasure and arousal mediate the relation between ad content and attitudinal components, and consequently viewing time of an ad. They used part of Mehrabian and Russell’s (1974) scale. Derbaix (1995) replicated the research of Edell and Burke (1987) in a natural setting. His emotion words were based on a restudy, and uncovered a positive and negative factor. Steenkamp et al. (1996) investigated the relations between arousal potential, arousal, and ad evaluation, with need for stimulation as a moderator. They based their arousal dimension on the scale of Mehrabian and Russell (1974).

In the satisfaction literature, Westbrook (1987) was one of the first to investigate consumer emotional responses to product/consumption experiences and their relationship to several central aspects of post-purchase processes. Oliver (1993) extended this work by showing that emotional responses mediate the effects of product attributes on satisfaction. Both studies relied on Izard’s (1977) taxonomy of fundamental affects, and found positive and negative affect as underlying emotion dimensions. Mano and Oliver (1993) investigated the structural interrelationship among evaluations, feelings, and satisfaction in the post-consumption experience. They combined Watson et al.’s (1988) PANAS scale and Mano’s (1991) circumplex scale. Both three dimensions—similar to the upbeat, negative, and warmth factors of Edell and Burke (1987)—and two dimensions—positive and negative affect—were uncovered, but only the latter dimensions were used in the studies.

Dube and Morgan (1998) modeled trends in consumption emotions and satisfaction in order to predict retrospective global judgments of services. They used the PANAS scale (Watson et al., 1988) and uncovered positive and negative affect. Phillips and Baumgartner (2002) confirmed the importance of including positive and negative affect in explaining satisfaction. Smith and Bolton (2002) investigated the role of consumer emotions in the context of service failure and recovery encounters. They used content analysis for the responses of the participants and grouped the (negative) emotion words of consumers in five categories.

Holbrook and Gardner (1993) investigated the relation between the emotional dimensions pleasure and arousal and the duration of a consumption experience, which was in their case, listening to music. They used Russell et al.’s (1989) Affect Grid to measure pleasure and arousal of the musical stimuli.

Nyer (1997) and Ruth et al. (2002) focused on defining the antecedents rather than the consequences of emotions. Nyer (1997) showed that the appraisals of goal relevance, goal congruence, and coping potential are determinants of several basic consumption emotions. These emotions were mainly based on Shaver et al. (1987).
Ruth et al. (2002) explored the cognitive appraisals of situations and their correspondence to 10 experienced emotions. They also used emotions based on the hierarchical structure of Shaver et al. (1987).

In summary, this overview shows that there is wide divergence in the content of emotions studied in consumer research. Studies often use different scales to measure emotions and focus on different emotions. In spite of this, consumer researchers frequently use, or exploratory data analysis yields, a small number of dimensions (Bagozzi et al., 1999).

3. Positive and negative affect

Results shows the emotion words and indicates which studies included a particular word as a positive or negative emotion word in their structure. The number of references for each emotion word illustrates to what degree researchers agree that this is an emotion word. For example, the emotion words fear, sadness, and happiness appear almost in every emotion structure, whereas others, like mournful, forlorn, and zeal, are only mentioned occasionally.

Yet, which of these many emotion words should be used to measure consumer emotions? To address this issue, we can use the important study by Richins (1997). Based on extensive research, she constructed the Consumption Emotion Set (CES). This scale includes most, if not all, emotions that can emerge in consumption situations and was developed to distinguish the varieties of emotion associated with different product classes.

Advantages of the division in positive and negative affect are that (1) the model can be kept simple and (2) the combination of a person’s positive and negative affect is indicative of his/her attitude. The disadvantage is that important distinctions among different positive and negative emotions disappear (Lerner and Keltner, 2000; 2001). Thus, more precise information about the feelings of the consumer is lost (Bagozzi et al., 1999). Because different emotions can have different behavioral consequences, it is important to know, for example, whether a failure in a product or service elicits feelings of anger or sadness. Both angry and sad people feel that something wrong has been done to them, but whereas sad people become inactive and withdrawn, the angry person becomes more energized to fight against the cause of anger (Shaver et al., 1987). Several studies have shown how important it is to take into account differences across emotions of the same valence (Lerner and Keltner, 2000; 2001; Zeelenberg and Pieters, 1999).

4. A hierarchy of consumer emotions

The research streams supporting the different emotion structures (positive/negative vs. specific emotions) seem opposing, but can in fact be seen as complementing.
Shaver et al. (1987) and Storm and Storm (1987) have suggested that emotions can be grouped into clusters, yielding a hierarchical structure. The most general, superordinate, level consists of positive and negative affect. The next level is considered as the basic emotion level, and the lowest, subordinate, level consists of groups of individual emotions that form a category named after the most typical emotion of that category. Along the lines of the hierarchical structures of Shaver et al. (1987) and Storm and Storm (1987), we thus propose that consumer emotions can be considered at different levels of abstractness.

Our hierarchy of consumer emotions distinguishes between positive and negative affect at the superordinate level. The specific consumer emotions based on Richins’ (1997) CES encompass the subordinate level. Which basic emotions should constitute the intermediate level, however, is less clear. Basic emotions are believed to be innate and universal, but because there are different ways to conceive emotions (facial, e.g., Ekman, 1992; biosocial, e.g., Izard, 1992; brain, e.g., Panksepp, 1992), there is also disagreement about which emotions are basic (Turner and Ortony, 1992).

To develop a set of basic consumer emotions, we draw on the hierarchical structures of Shaver et al. (1987) and Storm and Storm (1987). Some basic emotion words are mentioned in most of the structures. These are anger, fear, love, sadness, disgust, joy, and surprise. Anger, fear, love and sadness are basic emotions in both the structures of Shaver et al. (1987) and Storm and Storm (1987), and will be retained in our structure. Disgust is not included in the structure of Richins (1997) and therefore excluded as a basic consumption emotion.

Surprise was excluded for several reasons. First, it is a neutral emotion (Storm and Storm, 1987) and therefore impossible to classify as a positive or negative emotion. Second, when participants were required to list emotions, surprise was hardly mentioned (Fehr and Russell, 1984). Following Storm and Storm (1987), we added the emotion shame to the basic negative emotions. Anger, sadness, and fear are all emotions elicited by situations caused by others or circumstances, whereas shame is caused by a negative action of consumers themselves (Roseman et al., 1996).

The positive emotions can be roughly divided in interpersonal emotions and emotions without interpersonal reference (Storm and Storm, 1987). The interpersonal emotions are covered by love and its specific emotion words, but there are distinct differences between the emotions that are not interpersonal. Following Storm and Storm (1987), we therefore replaced the more general term joy by the basic emotions contentment, happiness, and pride. Contentment is low in arousal and passive, whereas happiness is higher in activity and a reactive positive emotion. Pride, on the other hand, concerns feelings of superiority. Due to these
differences, we argue that it is better to include these basic emotions separately rather than all under one large basic emotion of joy. Our proposed hierarchy thus consists of three levels: the super ordinate level with positive and negative affect, the basic level with four positive and four negative emotions, and the subordinate level with specific emotions.

5. Method
5.1. Sample and procedure
Data were collected in a 200 representative sample among consumers using a questionnaire. The average age was 35 years and ranged between 20 and 50 with a fairly normal spread. Respondents were asked to indicate to what extent they experience 33 specific emotions for one (randomly assigned) type of food (genetically modified food, functional food, organic food, or regular food). Thus, we measure emotions at a general, product-type level of categorization. In The Netherlands, these types of foods are widely known, the exception being functional foods (this was confirmed in discussions with industry experts).

5.2. Measures
Emotions were rated on a five-point Likert scale ranging from I feel this emotion not at all (1) to I feel this emotion very strongly (5). In our empirical test, we omitted the basic emotions blove Q and bpride Q, and the Fig. 1. Hierarchy of consumer emotions. emotion words benviousQ and bjealousQ. bLoveQ is demonstrated to be mainly experienced in the case of sentimental products, like mementos and gifts (Richins, 1997). The latter three emotions are interpersonal and less applicable in the case of widely available food. The emotion bprideQ generally occurs when a consumer feels superior compared to another person, whereas the emotions benvyQ and bjealousyQ occur when consumers feel that another person has something more or better than them. Thus, the basic emotions in our analyses are as follows: anger, fear, sadness, shame, contentment, and happiness, measured in total by 33 specific emotion words.

5.3. Stability of the emotions structure across food types
Before we can test our second-order hierarchical model of consumer emotions, we have to establish whether we can pool the data across the four food types. We do this in two ways. First, we assess whether principal component analysis yields the same factor structure in each of the four food groups. The Bartlett’s test of
sphericity is significant for all four foods, and the measure of sampling adequacy ranges between .86 (organic food) and .92 (genetically modified food), which means that principal component analysis can be applied. The scree test indicated two factors in all four groups, explaining between 48% (regular food) and 60% (genetically modified food) of the variance. The factor structures (after rotation) were highly similar, Tucker’s congruence coefficient always being greater than .95 (P b.01; Cattell, 1978).

A second way to assess the similarity of the four food groups is to test for the invariance of the covariance matrices across the four groups using LISREL 8.50 (Steenkamp and Baumgartner, 1998). The fit was good, given the large sample and high number of degrees of freedom (Baumgartner and Homburg, 1996): \( \chi^2(1683)=3845.90 \) (P b.001); CFI=.86; TLI=.82. Hence, we can pool the data across the different food types.

6. Results
6.1. Testing the proposed model
We used LISREL 8.50 to test the proposed hierarchical emotions model. The standardized parameter estimates of the second-order factor analysis are reported in Fig. 2.
Model fit is acceptable: \( \chi^2(490)=3036.79 \) (Pb.001), CFI=.84, TLI=.83. Although the \( \chi^2 \) was highly significant (not unexpected given the large sample size; Anderson and Gerbing, 1988), other indicators suggest reasonable model fit, especially considering that fit is adversely affected by model complexity (Baumgartner and Homburg, 1996; Bollen, 1989; Bone et al., 1989). In addition, the fit measures are in line with simulation results (see Gerbing and Anderson, 1993 for a review) and compare favorably to other models with similar degrees of freedom (e.g., Netemeyer et al., 1991; Richins and Dawson, 1992; Wong et al., 2003).
All factor loadings were significant at P b.001, the average loading being .73. Only the factor loading of the emotion nostalgia on the basic emotion sadness was below .40. A possible explanation for this is that nostalgia involves complex emotional responses and can have both a positive and a negative connotation (Holak and Havlena, 1998). The correlation between the second-order factors positive and negative affect was significant (r=_.35, Pb.01), confirming earlier results found in consumer research (e.g., Westbrook, 1987; Phillips and Baumgartner, 2002).
These results support the convergent and discriminant validity of our model (Steenkamp and Van Trijp, 1991). The reliability of our measures was high. Cronbach alphas were a=.94 and a=.95 for the dimensions positive and negative affect, respectively. The basic emotions yielded the following reliabilities: anger
(a=.88), fear (a=.88), sadness (a=.76), shame (a=.74), contentment (a=.86), and happiness (a=.92).

6.2. Comparison of the super ordinate level with the basic emotions
Although the emotion structure is similar for the four food groups that do not imply that the various foods evoke the same emotional intensity. ANOVA with multiple comparisons (LSD) was used to investigate whether the mean values across food groups are significantly different. Participants experience significantly more negative affect and less positive affect for genetically modified foods than for the other food groups. Yet, the basic emotions show differences among the food types that would have been lost if only positive and negative affect had been considered. Both the basic emotions fear and contentment contain additional subtle distinctions across the food groups. The negative affect experienced by consumers is similar for functional, organic, and regular food. Yet, consumers feel a lot more fearful concerning functional food than for organic and regular food. Concerning the positive emotions, contentment has very low values for organic food compared to functional and regular food. These nuances, however, are wiped away for positive affect. To demonstrate the usefulness of basic emotions for understanding the consumer’s feelings, we will take a closer look at one of the food groups. Genetically modified food represents a controversial topic in contemporary society, and previous research (e.g., Bredahl, 2001) has shown that consumers have a rather negative attitude towards this type of food. The scores on negative and positive affect support this, but the basic emotions indicate more clearly how consumers feel. Participants do not feel sad or ashamed, but are very angry and afraid. This means that they feel energized and powerful rather than inactive, and feel that they themselves are not to be blamed, but someone else is.

7. Conclusion
Based on our literature review, we concluded that despite the different ways to measure emotions, positive and negative affect are frequently employed as general emotion dimensions. Important nuances, however, are lost if emotions of the same valence are collapsed together. This paper therefore proposed a hierarchical model of consumer emotions to integrate the different research streams concerning emotion content and structure. This model specifies emotions at three levels of generality. At the super ordinate level, it distinguishes between positive and negative affect. At the super ordinate level, it distinguishes between positive and negative affect. This is generally considered to be the most abstract level at which emotions can be experienced (e.g., Berkowitz, 2000; Diener, 1999). At the level of basic emotions, we specify four positive (contentment, happiness, love, and pride) and four
negative (sadness, fear, anger, and shame). At the subordinate level, we distinguish between 42 specific emotions based on Richins’ (1997) CES. Our empirical study provides support for the proposed model and suggests that the basic emotions allow for a better understanding of the consumers’ feelings concerning certain food products compared to only positive and negative affect. Note that not in all situations this model need be used as a whole. Dependent on the research question, only part of the model may be used. However, even in such cases, the researcher can still relate his/her specific results to the broader structure of our emotions. This makes it easier for emotions research to cumulatively build on each other and to identify gaps in our knowledge.
References


