

## Negative emotions, value and relationships: Differences between women and men

By: Barry J. Babin, Mitch Griffin, Adilson Borges, and [James S. Boles](#)

Barry J. Babin, Mitch Griffin, Adilson Borges, and James S. Boles, "Negative Emotions, Value and Relationships: Differences Between Women and Men," *Journal of Retailing and Consumer Services* Vol. 20 (Number 5, September 2013), 471-478.

<https://doi.org/10.1016/j.jretconser.2013.04.007>



© 2013 Elsevier Ltd. This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).

### **Abstract:**

Service experiences are characterized by emotions that help shape the value in use received by the customer. Negative emotion plays an important role in all of consumer psychology and all too often consumers experience some degree of negative emotion during a consumption experience. This research sheds light on how these negative shopping emotions experienced by men and women in a typical shopping environment affect value and relationships in the form of shopper behavior, commitment and share of wallet. A theoretical process is explained and modeled with a sample of mall shoppers. Results overall suggest that negative emotions affect the shopping experience more for women than for men in terms of perceived value and loyalty. In contrast, the behavior-commitment relationship is stronger for men.

**Keywords:** store atmosphere | gender differences | negative emotion | value | shopping

### **Article:**

#### **1. Introduction**

The shopping experience is a focal point of retail and marketing theory. Shopping brings marketers and consumers together each performing activities aimed at creating value. Over time, repeated valuable shopping experiences build committed relationships between marketers and consumers. Retail environments vary in the store layout, colors, design, employee appearance and other elements that comprise the whole store atmosphere. A significant body of research demonstrates the importance of the retail and service atmosphere in shaping the emotions consumers experience (Vierira, 2013). Emotions in turn affect shopping value and consumer's repeated patronage in the form of future visits and future buying (Babin and Attaway, 2000).

Marketing and consumer researchers have increasingly studied emotions over the recent decades. Although the psychology literature recognizes the particular role played by negative emotions in shopping behavior, relatively little marketing research focuses specifically on negative emotion and the resulting effects (cf., Lindenmeier et al., 2012). Negative emotion is a powerful driver of avoidance behavior and understanding how negative emotional reactions affect the consumers is important for retailers (Babin et al., 1998). Moreover, the effects of negative emotions across two

primary segments of consumers, men and women, are important as marketers try to build effective loyalty programs for different market segments. In social psychology, emotion expressive theory suggests that men and women respond differently to negative emotions in terms of information processing and avoidance behavior (Choti et al., 1987, Kring and Gordon, 1998). Similarly, marketing research suggests that men and women do not respond to retail environments in the same way either (Luceri and Latusi, 2012). Thus, both theoretically and practically, research suggesting different ways that consumers react to negative emotions offers potentially valuable insight.

This research focuses on questions about how men and women react to negative shopping emotions. Does negative emotion experienced during a shopping trip affect the value of an experience differently for women than it does for men? Does negative emotion impact customer commitment or share of wallet differently for men than it does for women? We develop and test a model explaining these relationships. The results extend retail theory by focusing on negative emotions experienced in the atmosphere, linking negative emotions to shopping outcomes, and examining the extent to which gender<sup>1</sup> moderates the process by which negative emotions diminish loyalty. Furthermore, the model captures behavioral loyalty in terms of share of wallet and affective loyalty in terms of customer commitment. As a consequence, the results provide normative insight allowing retailers to develop more effective relationship strategies in addition to contributing to our knowledge of the way consumers react to shopping experiences.

## **2. Background literature**

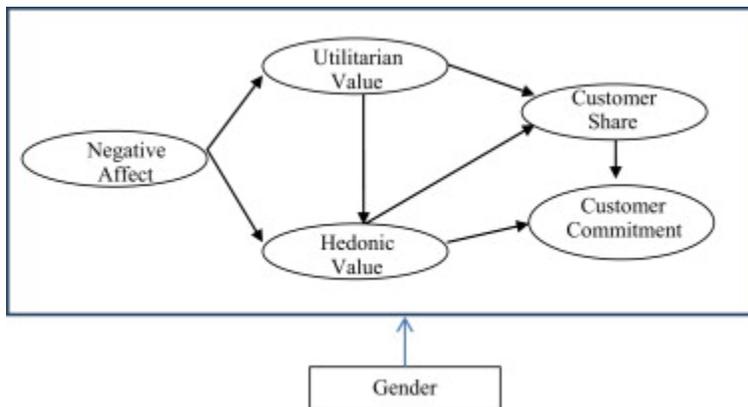
### **2.1. Negative affect, value and loyalty**

Emotional reactions and perceived shopping value play important explanatory roles in marketer-customer relationships. Consistent with operant conditioning, customers will want to repeat rewarding shopping experiences. Empirical evidence suggests that subjective value perceptions intervene between atmospheric emotions and repeated patronage behavior, with hedonic value relating slightly more strongly to behavioral loyalty than does utilitarian value (Babin and Attaway, 2000). This section briefly overviews the theoretical rationale for the overall model depicted in Fig. 1.

The basic research proposition implied by the model is that negative emotion reduces shopping value and loyalty. Consumers who experience negative emotions in a store atmosphere tend to avoid or withdraw from that particular environment (Orth et al., 2010, Borges et al., 2010). For example, consumers become more irritated with common experiences such as waiting lines and crowded environments, each of which creates negative emotion (Kalamas et al., 2008). Moreover, Babin and Attaway (2000) present research results demonstrating deleterious effects from negative emotions to both utilitarian and hedonic shopping value.

---

<sup>1</sup> Technically, any division based on biological classification deals with the sex of the species, the female *sex* of the species being able to bear children and the male being unable to do so. Because the study does not rely on or operationalize the division based on societal expectations nor one's own perceived fit with those expectations, the moderating variable is, arguably, most directly referred to as sex. Sex can be distinguished from gender, but for most practical purposes the marketing literature treats the two terms, rightly or wrongly, as the same. The convention in the literature has been to use the term gender even when referring to the simple measurement of one as biologically male or biologically female. Thus, after this point, the term gender is adapted more generally.



**Fig. 1.** Theoretical model of the effects of negative affect on value and loyalty.

Value is a prerequisite for consumers in developing relationships with marketing entities. Relationships imply a loyal consumer. In this study, both a behavioral dimension and an affective dimension that we refer to as commitment capture loyalty. Thus, value causes loyalty-related reactions. Utilitarian value received from a particular retail experience, for instance, increases customer share. A study of supermarket customers provides evidence in support of this position by showing a positive relationship between beliefs about service *quality* (defined as a composite of beliefs about utilitarian store attributes) and repeat patronage intentions (Siroh et al., 1998). Other research supports a causal link between utilitarian value consumers receive from interacting with an electronic retailer and repeated patronage intention (Chang and Tseng, forthcoming). This relationship is more consistent with the notion of simple customer inertia (i.e., customer share) than commitment since utilitarian value lacks the affective undertone necessary to link directly to customer commitment.

Hedonic value also is expected to increase customer share as previous research suggests (Babin and Attaway, 2000). Moreover, the experiential nature of hedonic value may lead to a direct effect on customer commitment as well. Repeatedly gratifying experiences reinforce consumers' attitudes that govern store choice. Thus, we expect that hedonic value will directly impact customer commitment. The model also includes a direct relationship between utilitarian and hedonic value. Research suggests a modest positive correlation exists between the two value dimensions based on the idea that task fulfillment can be intrinsically rewarding (e.g., Chebat et al., 1999, Eroglu and Machleit, 1990, Massicotte et al., 2011). Most businesses offer *loyalty* programs based on the premise that repeated behavior will build customer commitment (O'Brien et al., 1995, Rust and Zahorik, 1993). This may be true for some, but certainly not all relationships. In many situations, switching costs may be sufficiently high, or involvement sufficiently low, to induce repeat behavior with little if any attachment toward the firm. However, as familiarity with a service provider increases, a personal relationship may evolve and eventually build commitment. The end result is likely a positive relationship between customer share and commitment.

## 2.2. The moderating role of gender

A second guiding research proposition is that one's gender changes the negative affect-loyalty model. Gender, as an individual difference variable, may moderate relationships between negative emotion, value and behavior. Choti et al. (1987) show a gender difference in the link between reported emotions and behavior—for women, the relationship between anger and crying is positive, while for men this relationship is negative. Similarly, gender differences may exist in the proposed model. The precise cause of the differences in reactions is difficult to determine but the social expectations generation after generation reinforce the communal and agentic gender roles assigned to women and men in society (Fiske and Stevens, 1993).

Men and women tend to express differently the way they feel emotions (Schwartz et al., 1980). For instance, a study by Kring and Gordon (1998) represents typical research investigating gender differences in reactions to emotion. In their study, subjects viewed emotion-inducing film clips, including a man swarmed by cockroaches and a man about to fall off a tall building. Subjects individually viewed each video while being recorded secretly by video camera. Their reactions to these videos provide focal responses for analysis. Across studies, women tend to show more emotions than men based upon the facial expressions displayed during the videos. Further, some specific differences in self-report emotions were found. For instance, women report higher fear-disgust and sadness than do men (Kring and Gordon, 1998). In a second study, men report higher levels of low-intensity emotions (like boredom) than do women.

Gottman and Leveson (1992) had subjects view a disgusting film, depicting either an amputation or a burn victim, with emotion suppression instructions serving as the experimental treatment. Their results generally showed no sex differences attributable to the treatment, including no effect on self-report disgust. However, subjects were given an opportunity to quit the experiment at any time. While none of the men quit, multiple female subjects excused themselves before viewing the entire film. This suggests that, at least for the negative emotion of disgust, women's emotions may be tied more closely to their approach-avoidance behavior.

Moreover, Grabe and Kamhawi (2006) find that women tend to avoid negatively framed news, rating positively framed news as more arousing. Also, negative news reduced recognition memory and comprehension scores among women with inverse results evidenced among men. Thus, women seem to avoid stimuli that evoke negative feelings more than do men.

Other research suggests that general emotional expressivity is multidimensional consisting of a general factor, emotional expressivity, and several first order factors, positive expressivity, negative expressivity, and impulse intensity. These studies often address relationships between emotional expressivity and *two major dimensions* of emotion, positive and negative affect (Gross and John 1997, p. 437). Gross and John (1998) conclude that men are less expressive on every aspect and mask emotions more than do women. Further, correlations between expressivity and both the positive and negative affect dimensions of PANAS differ between sexes but remain significant when sex is controlled for (Gross and John, 1997). In a shopping context, the women then may react more strongly to experienced negative emotion as those bad vibes diminish the gratification of the experience. Based on this discussion, we propose that the impact of negative affect would be moderated by gender. For instance, negative affect will negatively impact both utilitarian and hedonic values to a greater extent for women than for men.

Role theory suggests that men generally display a simplistic approach to shopping. Consistent with this role, male food shoppers have been found to be (1) less likely to plan their shopping, (2) less prone to use coupons or be interested in price reductions, (3) faster shoppers, and (4) less likely to believe shopping is an important task (Zeithaml, 1985). Women also place greater importance on frequent specials, helpful personnel, in-stock specials, pleasant check-out, well-stocked shelves, convenient location, and attractive decor (Alreck and Settle, 2002). Following from above, women are likely to be more knowledgeable about alternatives and better able to consider alternatives once the value of a retail experience is diminished. Thus, the value-behavior link is likely stronger among women.

*Sex differences in commitment:* Does customer share lead to commitment to a greater extent in men compared to women? Women are generally believed to be more relationship oriented and to place greater importance on social relationships than men (see for example McNeilly and Goldsmith, 1991, Hazan and Shaver, 1994). Consistent with this belief, women rate the importance of the perceptions of a sales staff in deciding to patronize one of several competing automotive services higher than do men (Darley et al., 2008). In the same line of thought, the quality of the interaction with a retailer's employees is more important than merchandise quality in explaining loyalty for women (Babakus and Yavas, 2008).

How do differences in relationship orientation manifest themselves in nonpersonal relationships? The organizational literature addresses this issue by examining potential gender differences in employee organizational commitment. Chung (2002) found that females scored higher than males on career commitment scale. Evidence also suggests that one's gender may moderate the link between continuance commitment and affective commitment (attachment) dimensions. Organization researchers argue that because women have *higher sunk costs* and fewer opportunities should they leave their job, they may not exhibit a strong relationship between attitudinal commitment and continuance. Consistent with this position, male service providers, as opposed to female service providers, display a stronger job satisfaction-quitting intention relationship (Babin and Boles, 1998) and a stronger organizational commitment-quitting intention relationship (Russ and McNeilly, 1995, Aven et al., 1993). Applied to the current study, we expect that the link between customer share and customer commitment may be lower for women than men. Further, males' agentic orientation makes them more resistant to undoing a solution that has already worked. Indeed, doing so may bring into question their mastery of such a simple task. To avoid dissonance, male attitudes may become more resistant to change. Therefore, the share of wallet will have a positive impact on customer commitment to a greater extent for men than for women. Fig. 1 summarizes and depicts the proposed theoretical process.

### **3. Research methods**

#### **3.1. Sample**

Data were gathered using a sample of consumers from a mid-size, Midwestern, university community. Respondents were recruited by graduate marketing research students who served as interviewers as part of a semester-long class project. Instructions provided students with target demographic characteristics in an effort to match sample characteristics to those typifying patrons of the only major shopping mall in this community. Students screened respondents for

familiarity with the major anchor stores in the mall. In the relevant part of the project, the student interviewers administered a paper and pencil questionnaire. Respondents were required to give a first name and telephone number so that responses could be verified.

Respondents described their shopping experiences with a randomly assigned mall anchor store. Each participant was asked to describe a “typical” shopping trip to the assigned store. All subsequent responses were geared toward that shopping trip. This assignment was done to assure variance in the atmosphere of stores while maintaining a high degree of overlap in merchandise lines. A total of 360 consumers were recruited. Respondents who had not visited the assigned store within the previous 3 months were excluded from analysis. Also, listwise deletion based on missing data was performed in preparation for structural equations analysis. These steps resulted in a final useable sample of 278 respondents. Roughly consistent with the makeup of this mall’s shoppers, 161 (58 percent) of the final respondents were female.

### 3.2. Measures

Every attempt was made to design a questionnaire that would address the research purpose adequately but succinctly. Appendix A displays the scale items. The first items evaluated *customer commitment*, the attitudinal component of customer loyalty, and were adapted from Mowaday et al. (1979). Responses were collected using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Six indicators of *customer share* for a particular retailer were used to represent a behavioral loyalty component (Babin and Attaway, 2000). The items capture the relative amount of resources spent in the assigned store compared to other competing stores. Given that the stores have very similar product assortments, this scale provides a succinct way of capturing consumer resource allocations. An abbreviated version of the Personal Shopping Value scale was adopted (Babin et al., 1994). Five items capture the hedonic dimension of shopping value and three for the utilitarian dimension. Respondents were instructed to respond to the items as if *you had just completed the typical shopping trip to [store x]*.

**Table 1.** Descriptive statistics and construct reliability.

	Hedonic value	Utilitarian value	Customer share <sup>a</sup>	Customer commitment	Negative affect
Hedonic value	1.00				
Utilitarian value	0.47	1.00			
Customer share	0.59	0.41	1.00		
Customer commitment	0.79	0.46	0.74	1.00	
Negative affect	-0.59	-0.40	-0.45	-0.51	1.00
Variance extracted	0.54	0.52	0.50	0.51	0.54
Construct reliability	0.85	0.76	0.85	0.84	0.83
Mean (summed scale)	15.20	10.60	0.08	13.21	12.26
Standard deviation	4.52	2.30	4.70	4.44	3.18

<sup>a</sup> Normalized to a common metric with zero mean.

Negative affect indicators are consistent with those used in numerous previous studies (cf. Donovan and Rossiter, 1982, Dawson et al., 1990, Hui and Bateson, 1991). Respondents

were asked to describe a typical shopping trip to [store x] on a 5-point scale ranging (from 1—do not feel at all to 5—feel extremely). Table 1 provides descriptive statistics for these measures.

## 4. Results

### 4.1. Overall measurement model results

The latent measurement structure was tested using confirmatory factor analysis (CFA) (Gerbing and Anderson, 1988). Covariance coefficients among the measured items were constrained based on the implied congeneric measurement theory. Two items were dropped based on high residuals following the first attempt at fitting the model, yielding a final model with 30 measured items. The resulting  $\chi^2$  fit statistic is 374.1 with 220 degrees of freedom. The model comparative fit index (CFI) is 0.983, the root mean squared error of approximation (RMSEA) is 0.045, and the parsimony normed fit index (PNFI), which is useful in assessing the relative fit of models (Mulaik et al., 1989), is 0.838. All factor loadings are highly significant ( $p < 0.001$ ) and the variance extracted estimates (Table 1) range from 0.50 to 0.54. Construct reliability coefficients range from 0.76 to 0.85. All indicators suggest adequate fit and convergent validity (see Table 2).

**Table 2.** Fit indices for structural equations models.

Model	$\chi^2$	df	CFI	RMSEA	PNFI
Overall CFA	374.1	220	0.983	0.045	0.838
Overall structural model	380.2	223	0.983	0.045	0.849
2 Group CFA TF	585.2	440	0.982	0.044	0.822
2 Group CFA $\Lambda$ Invariant	609.6	458	0.981	0.044	0.854
2 Group TF structural	590.1	446	0.982	0.044	0.833
2 Group structural parameters invariant	618.5	453	0.979	0.046	0.843
2 Group structural NA-HV invariant	602.4	447	0.981	0.045	0.833
2 Group structural NA-UV invariant	596.5	447	0.981	0.045	0.833
2 Group structural CS-CC invariant	597.1	447	0.981	0.045	0.833

Note: NA=Negative affect, HV=Hedonic value, UV=Utilitarian value, CS=Customer share, CC=Customer commitment.

Discriminant validity was assessed using conventional procedures (Fornell and Larcker, 1981, Gerbing and Anderson, 1988). Two of 10 squared correlation estimates are greater than the variance extracted estimates for the respective constructs. In the remaining two cases, constraining the measured variables from both factors onto a single factor severely diminished the model fit thereby providing evidence of discriminant validity. Therefore, the overall measurement model adequately represents the theoretical constructs and is appropriate for testing the structural model.

### 4.2. Overall theoretical model results

We first examine the overall results across all respondents. The constraints representing the negative affect-retail patronage loyalty model shown in Fig. 1 were placed on the overall covariance matrix. The  $\chi^2$  resulting from testing the model is 380.2 with 223 degrees of freedom. The CFI is 0.983, the PNFI is 0.849, and the RMSEA is 0.045. All suggest a reasonably good fit

given the model parameters. The measurement coefficients also remain stable across the measurement and theoretical models, an indication that interpretational confounding is not present (Anderson and Gerbing, 1992). Further, the  $\chi^2$  difference between the measurement and structural model is not significant ( $\Delta\chi^2=6.1$ ,  $df=3$ ) suggesting that the theoretical paths adequately fit the covariation among latent constructs (Hair et al., 2009).

*Structural coefficient estimates.* Table 3 lists the standardized structural parameter estimates. Negative affect displays a significant, negative effect on both hedonic ( $\gamma=-0.48$ ,  $p<0.001$ ) and utilitarian shopping value ( $\gamma=-0.41$ ,  $p<0.001$ ). In addition, significant, nontrivial, indirect effects exist between affect dimensions and loyalty dimensions. As shown at the bottom of Table 3, the indirect paths between negative affect and customer share ( $ie=-0.38$ ,  $p<0.001$ ) and negative affect and customer commitment ( $ie=-0.49$ ,  $p<0.001$ ) are significant.

**Table 3.** Standardized structural path estimates for the overall emotion-loyalty theoretical model.

Direct path to	Path from				$R^2$
	Negative affect	Hedonic value	Utilitarian value	Customer share	
Hedonic Value	-0.48 (-7.14)		0.28 (4.39)		0.43
Utilitarian Value	-0.41 (-5.90)				0.16
Customer Share		0.51 (7.25)	0.17 (2.59)		0.38
Customer Commitment		0.55 (7.12)		0.41 (6.15)	0.74
<b>Indirect effects on</b>					
Customer Share	-0.38 (-7.60)		0.15 (3.92)		
Customer Commitment	-0.49 (-7.12)	0.21 (5.07)	0.29 (4.80)		

Note: all parameter estimates statistically significant ( $p<0.01$ ).

Consistent with expectations, both hedonic and utilitarian shopping value affect customer share. Hedonic value ( $\beta=0.51$ ,  $p<0.001$ ) has a substantially more positive effect than does utilitarian value ( $\beta=0.17$ ,  $p<0.01$ ). Additionally, hedonic shopping value affects customer commitment directly ( $\beta=0.55$ ,  $p<0.001$ ). Also as expected, the behavioral loyalty element, customer share, is positively related to the affective element, customer commitment ( $\beta=0.41$ ,  $p<0.001$ ).

Additionally, utilitarian shopping value displays significant indirect effects on both customer share and customer commitment ( $ie=0.15$ ,  $p<0.001$ ;  $ie=0.29$ ,  $p<0.001$ , respectively) and hedonic value indirectly affects customer commitment as well ( $ie=0.21$ ,  $p<0.001$ ). Although not this note's focus, the pattern of indirect results along with results of direct effect models not reported here supports the role of shopping value in mediating the effects of negative affect on loyalty constructs.

#### 4.3. Multigroup measurement results

We next turn to the multigroup comparisons. Relationship and mean differences from studies comparing potentially different groups are less reliable if they are derived without examining measurement equivalence (Meredith, 1993). This is considered an essential step in comparative cross-cultural research (Steenkamp and Baumgartner, 1998). Even on cognitive ratings, such as in judging a person's size, scale levels and intervals can differ between genders. The relative imbalance in how central emotional and communal experiences are to each gender's socio-cultural expectations strongly suggests a need to examine measurement invariance among affective and communal constructs (Fiske and Stevens, 1993).

The assumption implied in the vast majority of marketing research is that measurement structures between women and men are equivalent. As a pre-requisite for testing differences between groups, including the extent of moderation, a multiple group CFA analysis addresses potential measurement invariance. We report the details of this result in a technical appendix (see Appendix B) and provide only a brief summary of the results here. This analysis involves fitting the originally specified measurement model across both the covariance matrix for men and the covariance matrix for women simultaneously. A good fit, such as that observed here, indicates configural invariance ( $\chi^2=585.2$ ,  $df=440$ ,  $CFI=0.981$ ,  $PNFI=0.822$ ,  $RMSEA=0.044$ ). Metric invariance is examined by adding equivalency constraints to the factor loading estimates within the multiple group CFA model. As described in the appendix, these constraints do not worsen fit providing evidence that the factors function in much the same way for men and women. We also perform a test of scalar equivalence by constraining the intercept terms for each measured variable to be equal between groups. Similarly, this test suggests that the constraints do not worsen fit and provide evidence for scalar invariance. The end result is that valid comparisons between groups can be made for both structural relationships (the focus here) and latent construct means.

#### 4.4. Multiple-group structural results

Next, we analyzed moderation of the theoretical relationships using multiple group SEM analysis. First, we fit the structural model across the two groups simultaneously, freeing each theorized structural parameter in each group (the 2 Group Totally Free or "TF" model) (Hair et al., 2009). Table 2 displays the fit statistics for this and other multiple group models and Table 4 provides the resulting parameter estimates for each group.

The two group TF theoretical model produced a  $\chi^2=590.1$  with 446 degrees of freedom ( $CFI=0.982$ ,  $RMSEA=0.044$ ,  $PNFI=0.833$ ). These results suggest a good fit for the model. Equality constraints were placed on each of the  $\Gamma$  and  $\mathbf{B}$  matrices (structural coefficients), the matrices containing the structural parameters. The difference in fit between the TF model and the model constraining the structural parameters to be equal in each group is significant ( $\Delta\chi^2=28.4$ ,  $df=7$ ,  $p<0.001$ ). Thus, the added constraints significantly worsen fit and provide evidence that one or more relationships are different for men as opposed to women.

The variance in structural coefficients was investigated further by using 1 df  $\chi^2$  difference test comparing the TF fit with a model constraining the respective parameter to be the same in each group and by examining the TF parameter estimates. Constraining the negative affect-hedonic value relationship produces significantly worse fit ( $\Delta\chi^2=12.3$ , 1 df,  $p<0.001$ ). When freed, the

coefficient changes from  $\gamma=-0.16$  among men to  $\gamma=-0.67$  for women suggesting that women react more strongly to negative affect. Additionally, negative affect affects utilitarian value significantly only among women ( $\gamma_{\text{men}}=-0.13$  versus  $\gamma_{\text{women}}=-0.58$ ) and an equality constraint on this coefficient significantly harms fit ( $\Delta\chi^2=6.4$ , 1 df,  $p<0.05$ ).

**Table 4.** Structural path estimates for the 2-Group>Totally Free=Model.

Path to	Path from					$R^2$
	Negative affect	Hedonic value	Utilitarian value	Customer share	Customer commitment	
<b>Men</b>						
Hedonic Value	-0.16 (-1.92)		0.23 (1.12 ns)			0.11
Utilitarian Value	-0.13 (-1.70)					0.04
Customer Share		0.37 (3.56)	0.12 (0.48 ns)			0.16
Customer Commitment		0.46 (3.17)		0.52 (5.52)		0.66
<b>Women</b>						
Hedonic Value	-0.73 (-5.11)		0.27 (1.10 ns)			0.66
Utilitarian Value	-0.58 (-2.91)					0.27
Customer Share		0.5 (5.43)	0.18 (2.39)			0.49
Customer Commitment		0.65 (3.75)		0.29 (3.35)		0.78
<b>Differences in means</b>						
$\Delta\kappa$ (men relative to women)	0.14 (1.16)	-0.33 (-3.02)	-0.09 (-1.09)	-0.35 (-3.69)	0.28 (2.92)	

Note: *t*-values shown in parentheses, ns=not significant at  $p<0.05$ .

The shopping value-customer share and shopping value-customer commitment path coefficients are larger for women than for men. Constraining these paths fails to significantly diminish the model's fit, but the difference in critical ratio is significant in each case ( $p<0.05$ ). Thus, hedonic shopping value creates higher customer share ( $\beta=0.50$ ,  $p<0.001$ ) and commitment ( $\beta=0.65$ ,  $p<0.001$ ) for women more than it does among men ( $\beta=0.37$ ,  $p<0.001$  and  $\beta=0.46$ ,  $p<0.001$ , respectively). In addition, the utilitarian value-customer share relationship is significant only among women ( $\beta=0.18$ ,  $p<0.05$  versus  $\beta=0.12$ , ns, for men).

A larger difference is noted in the relationship between customer share and customer commitment. The relationship is significantly stronger among men ( $\beta=0.52$ ,  $p<0.001$ ) than it is among women ( $\beta=0.29$ ,  $p<0.001$ ). Constraining this single relationship to the same value across groups significantly worsens fit ( $\Delta\chi^2=7.0$ ,  $df=1$ ,  $p<0.01$ ) indicating a stronger customer share-customer commitment relationship among men. Consistent with expectations, the result shows that repeated behavior in the form of spending resources leads to affective loyalty in the form of commitment more strongly among men.

## 5. Discussion

This research seeks to address gaps in our understanding of differences in the context of how males and females deal with negative shopping experiences. Do men or women cope better with negative affect and does the process by which these feelings influence loyalty vary between male and female market segments? The results of a single study cannot provide a conclusive answer. However, the general thrust of the results suggests that the emotion-value-behavior-commitment link varies by gender.

First, the results suggest that female and male shoppers do not respond to negative affect in the same way. Among women, negative affect lowers utilitarian value and, through this mechanism, diminishes loyalty, both in terms of behavior and commitment. In contrast, the negative affect-utilitarian value is insignificant among men. This supports the idea that women and men *cope* differently with negative affect. Negative affect does not seem to interfere with the task-related aspects of shopping among men. However, analogous to the experimental results examining reactions to disgusting films (Gottman and Leveson, 1992), women may react more strongly under the influence of negative consumption emotion. Interestingly, these effects occur despite the fact that amount of negative affect does not differ significantly across men and women ( $\kappa=0.14$ , ns).

Although less strong, results also suggest more positive relationships between hedonic value and customer commitment, and between utilitarian value and customer share among women. Thus, investments in atmospherics and merchandising that contribute to shopping value appear more effective in building loyalty among female shopper segments.

The relationship between behavioral and affective loyalty is of key interest to relationship marketing. Results presented here suggest that once men establish a pattern of going to and spending in a store, that behavior translates into customer commitment much more so than it does among women. Therefore, consistent with the male agentic orientation, marketers that can entice men into repeat patronage, the repeated patronage pays off in greater increases in commitment yielding all the related advantages to the retailer. In other words, men may be more susceptible to marketing programs that entice repeat patronage.

### 5.1. Differences in experience

(Kring and Gordon, 1998, p. 699) succinctly capture the issue of sex differences in emotion as follows: *Are women more emotional than men? The answer is neither simple nor straight forward.* Indeed, differences may be highly subject to context (Borges et al., forthcoming). In a typical shopping context like the one studied here, women apparently react strongly to negative affect, and this in turn, decreases utilitarian and hedonic shopping value to a greater extent than it does for men. In addition, hedonic value leads to customer share to a greater extent for women than it does for men. In contrast, men report higher customer commitment. The lower level of customer share could result in men forming fewer relationships, while they appear more committed to those they do develop.

Taken together, the results suggest that emotion and value are important in building loyalty among both women and men. However, true commitment appears more driven by simple repeated behavior among men, while women are more driven by experiential elements. Iacobucci and Ostrom (1993) theorized that women (men) respond more to relational (core) aspects of exchange. Although their experiments failed to provide a general conclusion, their theory finds support here. Women respond more to experiential elements and may expect that a marketer provide more than just the *core* service aspects.

## 6. Limitations and future research

This study provides marketing researchers a useful step in better understanding emotions, relationships, and sex-differences. Some of the shortcomings of the present effort may provide avenues for future research. Obviously, the sample characteristics and the environment selected provide somewhat of a limitation. Future efforts should study other populations, as well as varying consumer and business to business contexts. For example, extending this study to a professional services context would be useful.

Like previous studies of consumer environment interactions, this study employed a general approach to capturing consumer affect. The issue of gender differences in emotional space merits further study. Given that a rather limited battery of negative emotion indicators was employed in this study, future research using different and more exhaustive affect/emotion batteries should address the issue of emotional invariance between the sexes in greater detail. Such a study could examine the idea that different emotional constructs exist within each gender.

As a practical matter, this study focused on only a few of many potential antecedents to customer loyalty. Factors such as perceived quality and perceived price fairness may prove interesting. Likewise, emotion was considered exogenous. Other endogenous measures also could be added. All of these approaches could provide a better understanding regarding the formation of relationship quality.

Finally, the sample consisted of only American shoppers from a single community. How would these results compare to cultures where socio-cultural expectations for women and men were more or less distinct than in the U.S.? This also raises the interesting question of whether or not culture or sex would prove to be the stronger moderating factor.

This study is certainly not the final work with respect to either customer loyalty or gender-differences. It does suggest that marketing researchers should not operate under the implied assumption that relationships are similar among women and men. Researchers should consider examining measurement invariance between sexes whenever possible. This would provide greater confidence in any comparisons of means and/or relationships that follow. Researchers also should consider controlling for gender whenever studying emotional/experiential or relationship oriented constructs. In this way, they would avoid making general conclusions that hold for only women or only men. Further, practicing marketers may take greater care to apply different approaches in building loyalty among female and male consumer segments. A *one-size fits all* approach to building consumer loyalty may at best, serve only one gender well, and at worst, it may represent a hybrid approach that appeals to neither gender.

## Appendix

CFA loading estimate

### Items used to assess customer commitment (CC):

1. I would not go out of my way at all to shop at <i>store x</i> .	-0.54
2. I talk up <i>store x</i> to my friends as a great place to shop.	0.74
3. I feel very little loyalty toward <i>store x</i> .	-65
4. I could just as well be shopping at a competing store as long as prices were similar.	0.80
5. For me, <i>store x</i> is the best of all possible stores to shop at.	0.81
6. I feel attached to <i>store x</i> .	dropped
7. I=I love shopping at <i>store x</i> for the rest of my life.	dropped

### Items used to assess customer share<sup>a</sup> (CS):

Please fill in the blanks below so that the statements describe you accurately.

1. My usual shopping trip to <i>store x</i> lasts about _____ minutes.	0.81
2. _____ out of every 5 times I shop for [the primary product category], I shop at <i>store x</i> .	0.78
3. Out of every \$100 I spend in a store like <i>store x</i> , I spend \$_____ at <i>store x</i> .	
4. Out of every \$100 I spend in a store like <i>store x</i> , I spend \$_____ elsewhere.	0.50
5. Out of every \$100 I spend on [the primary product category], I spend at \$_____ at <i>store x</i> .	0.60
6. What percentage of the money you spend on [primary product categories] each month do you spend in <i>store x</i> ?	
0-20                      21-40                      41-60                      61-80                      81-100	0.78
7. How much money do you usually spend at <i>store x</i> over a 3-month time period?	
0-\$20                      \$21-\$50                      \$51-\$80                      \$81-\$150                      Above \$150	0.71

Items three and four are indexed to provide a single indicator of the relative spending advantage of *store x*.

### Shopping value items:

#### Hedonic shopping value (HV)

1. During a trip to store x, I experience the thrill of the hunt.	0.73
2. A shopping trip to <i>store x</i> is truly a joy.	0.79
3. Compared to other things I could do, the time spent shopping at <i>store x</i> is truly enjoyable.	0.84
4. I enjoy shopping at <i>store x</i> for its own sake, not just for items I may purchase.	0.62
5. While shopping at <i>store x</i> , I am able to forget my problems.	0.67

#### Utilitarian shopping value (UV)

1. When shopping at <i>store x</i> , I find just the items I am looking for.	0.78
2. I accomplish just what I want to while in <i>store x</i> .	0.79
3. I can't usually buy the things I really need in <i>store x</i> .	-0.56

#### Negative affect (NA)

1. When shopping at <i>store x</i> , I feel bored.	0.79
2. When shopping at <i>store x</i> , I feel annoyed.	0.64
3. When shopping at <i>store x</i> , I feel disgusted.	0.79
4. When shopping at <i>store x</i> , I feel sleepy.	0.72

<sup>a</sup> Items normalized prior to analyses.

## Technical appendix

Measurement invariance

*Metric invariance*

We first established configural invariance by testing a CFA model in which the factor structure was identical in each group, but within which the loading estimates, covariance estimates and

error variance terms were all allowed to take on different values in each group. This totally free CFA (CFA TF) produces a  $\chi^2$  of 585.2 with 440 degrees of freedom ( $p < 0.001$ ) (CFI=0.982; RMSEA=0.0441; PNFI=0.822). The results suggest adequate fit for the given model complexity and each of the constructs exhibits adequate construct validity within its respective group. Thus, the conclusion that the factor structures are the same in each group is supported.

Full metric invariance was tested by comparing this result to those of a CFA constraining all loading coefficients to be the same for women as they are for men. The constraints do not significantly worsen fit as indicated by the insignificant  $\Delta\chi^2$  of 24.4 with 18 df ( $p = 0.14$ ). Given that the equality constraints do not significantly worsen fit, metric invariance is supported. Thus, the structural relationships can be compared between groups.

### *Scalar invariance*

Scalar invariance requires the introduction of the intercept terms into the equations for the measured variables ( $\tau_x$ ). After making this addition, a constraint was added requiring the intercept terms to be equal between groups. The CFA with this added constraint produces a fit that is not statistically different from the CFA TF ( $\Delta\chi^2 = 34.3$ ,  $df = 23$ ,  $p > 0.05$ ) suggesting equal intercepts. This result provides evidence of scalar invariance and allows inferences to be made concerning the differences in construct means.

### **References**

- Alreck, P., Settle, R.B., 2002. Gender effects on internet, catalogue and store shopping. *Journal of Database Marketing* 9 (2), 150-162.
- Anderson, J.C., Gerbing, D.A., 1992. Assumptions of the two-step approach to latent variable modeling. *Sociological Methods and Research* 20 (February), 321-333.
- Aven Jr., F.F., Parker, B., McEvoy, G.M., 1993. Gender and attitudinal commitment to organizations: a meta-analysis. *Journal of Business Research* 26 (1), 63-74.
- Babakus, E., Yavas, U., 2008. Does customer sex influence the relationship between perceived quality and share of wallet? *Journal of Business Research* 61 (9), 974-981.
- Babin, B.J., Attaway, J.P., 2000. Atmospheric affect as a tool for creating value and gaining share of customer. *Journal of Business Research* 49 (2), 91-99.
- Babin, B.J., Boles, J.S., 1998. Employee behavior in a service environment: a model and test of potential differences between men and women. *Journal of Marketing* 62 (2), 77-91.
- Babin, B.J., Darden, W.R., Griffin, M., 1994. Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of Consumer Research* 20 (4), 644-656.
- Babin, B.J., Darden, W.R., Babin, L., 1998. Negative emotions in marketing research: affect or artifact? *Journal of Business Research* 43 (3), 271-285.
- Borges, A., Chebat, J.-C., Babin, B.J., 2010. Does a companion always enhance the shopping experience? *Journal of Retailing and Consumer Services* 17 (4), 294-299.

- Borges, A., Babin, B.J., Spielmann, N., 2013. Gender orientation and retail atmosphere: effects on value perception, *International Journal of Retail & Distribution Management*, 66 (7), 864-870.
- Chang, E. C., Tseng, Y.F. Research note: E-store image, perceived value and perceived risk. *Journal of Business Research*, 66 (7), 2013, 864-870.
- Chebat, J.C., Gomboa, A., Michon, M., 1999. The role of odors in the shopping process. Paper presented at the 1999 American Marketing Association Winter Educators' Conference, St. Petersburg, FL, February 21.
- Choti, S.E., Marston, A.R., Holston, S.G., 1987. Gender and personality variables in film-induced sadness and crying. *Journal of Social and Clinical Psychology* 5 (4), 535-544.
- Chung, Y.B., 2002. Career Decision-making self-efficacy and career commitment: gender and ethnic differences among college students. *Journal of Career Development* 28 (4), 277-284.
- Darley, W.K., Luethge, D.J., Thatte, A., 2008. Exploring the relationship of perceived automotive salesperson attributes, customer satisfaction and intentions to automotive service department patronage: The moderating role of customer gender. *Journal of Retailing and Consumer Services* 15 (6), 469-479.
- Dawson, S., Bloch, P.H., Ridgeway, N.M., 1990. Shopping motives, emotional states and retail outcomes. *Journal of Retailing* 66 (Winter), 408-427.
- Donovan, R.J., Rossiter, J.R., 1982. Store atmosphere: an environmental psychology approach. *Journal of Retailing* 58 (Spring), 34-57.
- Eroglu, S., Machleit, K.A., 1990. An empirical study of retail crowding: antecedents and consequences. *Journal of Retailing* 66 (2), 201-221.
- Fiske, S.T., Stevens, L.E., 1993. What's so special about sex? Gender stereotyping and discrimination. In: Oskamp, S., Costanzo, M. (Eds.), *Gender Issues in Contemporary Society*. Sage Publications, Newbury Park, CA, pp. 173-196.
- Fornell, C., Larcker, D., 1981. Evaluating structural equations models with unobserved variables and measurement error. *Journal of Marketing Research* 18 (February), 39-50.
- Gerbing, D.A., Anderson, J.C., 1988. An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research* 25 (May), 186-192.
- Gottman, J.M., Leveson, R.W., 1992. Emotional suppression: physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology* 64 (April), 970-986.
- Grabe, M.E., Rasha Kamhawi, 2006. Wired for negative news? Gender differences in processing broadcast news. *Communication Research* 33 (5), 346-369.
- Gross, J.J., John, O.P., 1997. Revealing feelings: facets of emotional expressivity in self-reports, peer ratings, and behavior. *Journal of Personality and Social Psychology* 72 (February), 435-448.

- Gross, J.J., John, O.P., 1998. Mapping the domain of expressivity: multimethod evidence for hierarchical model. *Journal of Personality and Social Psychology* 74 (January), 170-191.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., 2009. *Multivariate data analysis: a global perspective*. Prentice Hall, New Jersey.
- Hazan, C., Shaver, P.R., 1994. Attachment as an organizational framework for research on close relationships. *Psychological Inquiry* 5 (1), 1-22.
- Hui, M.K., Bateson, J.E.G., 1991. Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research* 18 (September), 174-184.
- Iacobucci, D., Ostrom, A., 1993. Gender differences in the impact of core and relational aspects of services on the evaluation of service encounters. *Journal of Consumer Psychology* 2 (3), 257-286.
- Kalamas, M., Laroche, M., Makdessian, L., 2008. Reaching the boiling point: consumers' negative affective reactions to firm-attributed service failures. *Journal of Business Research* 61 (8), 813-824.
- Kring, A.M., Gordon, A.H., 1998. Sex differences in emotions: expression, experience, and psychology. *Journal of Personality and Social Psychology* 74 (March), 686-703.
- Lindenmeier, J., Schleer, C., Pricl, D., 2012. Consumer outrage: emotional reactions to unethical corporate behavior. *Journal of Business Research* 65 (9), 1364-1373.
- Luceri, B., Latusi, S., 2012. The Importance of consumer characteristics and market structure variables in driving multiple store patronage. *Journal of Retailing and Consumer Services* 19 (5), 519-526.
- Massicotte, M.-C., Michon, R., Chebat, J.-C., Joseph Sirgy, M., Borges, A., 2011. Effects of mall atmosphere on mall evaluation: Teenage versus adult shoppers. *Journal of Retailing and Consumer Services* 18 (1), 74-80.
- McNeilly, K.M., Goldsmith, R.E., 1991. The moderating effects of gender and performance on job satisfaction and intentions to leave in the sales force. *Journal of Business Research* 22 (3), 219-232.
- Meredith, W., 1993. Measurement invariance, factor analysis, and factorial invariance. *Psychometrika* 58 (December), 525-543.
- Mowaday, R., Steers, R.M., Porter, L.W., 1979. The measurement of organizational commitment. *Journal of Vocational Behavior* 14 (April), 224-247.
- Mulaik, S.A., James, L.R., Vanaltnine, J., Bennett, N., Lind, S., Stilwell, C.D., 1989. Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin* 105 (3), 430-445.
- O'Brien, Jones, L., Jones, C., 1995. Do rewards really create loyalty. *Harvard Business Review* 73 (May/June), 75-83.

- Orth, U., Yonca, L., Rose, G., 2010. Store-evoked affect, personalities, and consumer emotional attachments to brands. *Journal of Business Research* 63 (11), 1202-1208.
- Russ, F.A., McNeilly, K.M., 1995. Links among satisfaction, commitment, and turnover intentions: the moderating effect of experience, gender, and performance. *Journal of Business Research* 34 (1), 57-65.
- Rust, R.T., Zahorik, A.J., 1993. Customer satisfaction, customer retention and market share. *Journal of Retailing* 69 (Summer), 203-215.
- Schwartz, G.E., Brown, S.L., Ahern, G.L., 1980. Facial muscle patterning and subjective experience during affective imagery: sex differences. *Psychophysiology* 17 (1), 75-82.
- Siroh, N., McLaughlin, E.W., Wittink, D.R., 1998. A model of consumer perceptions and store loyalty intentions for a supermarket retailer. *Journal of Retailing* 74 (2), 223-245.
- Steenkamp, Jan-Benedict E.M., Baumgartner, H., 1998. Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research* 25 (June), 78-90.
- Vierira, V.A., 2013. Stimuli-organism-response framework: a meta-analytic review in the store environment. *Journal of Business Research* , <http://dx.doi.org/10.1016/j.jbusres.2012.05.009>.
- Zeithaml, Valerie, A., 1985. The new demographics and market fragmentation. *Journal of Marketing* 49 (Summer), 64-75.