Original Article

Understanding the relationship between brand loyalty, the prevailing economic environment and optimum stimulation level

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ABSTRACT **Drawing from the optimum stimulation level (OSL) framework, previous researchers have examined a variety of key brand topics, such as the relationships between individual exploratory tendencies, variety seeking and brand attitudes. In spite of these insights, little work to date has examined how the prevailing economic environment relates to individual OSL and consumer brand decisions. Thus, the present research provides an exploratory study that addresses this shortcoming by investigating the impact of consumer orientation toward the economic environment and individual differences in OSL on brand loyalty. The findings of two studies indicate that consumers do indeed consider the economic environment when making brand decisions. In particular, the results suggest that individual OSLs as well as cognitive and affective orientation toward the prevailing economic environment impact brand loyalty.**
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INTRODUCTION

A link between consumers' individual differences, external environmental influences and brand purchase decision was first proposed by Raju (1980), and later confirmed by Steenkamp and Baumgartner (1992). The

researchers demonstrated that behaviors, such as brand variety seeking or brand loyalty, are influenced not only by factors such as employment status or income, which in turn are impacted by the broader economic environment, but also by optimum stimulation levels (OSLs). Despite these insights about OSL and consumer behavior, a paucity of research exists connecting the effects of these macro external factors (for example, prevailing economic conditions, international political climate, attitudes toward national security) and brand loyalty.

Because there is still much to understand about this topic, the primary objective of the present research is to extend prior brand attitude research that has not sufficiently theorized the impact of the prevailing economy. A second objective is to broaden the understanding of OSL to include the experience of the economic environment and to explore whether consumer purchase decisions are contextualized in the prevailing economic climate. A third objective is to provide insights for marketing practitioners as they account for the economic environment. To meet the aforementioned objectives, two studies are presented that rely upon OSL as a theoretical guidepost to develop and answer three key research questions about the relationships between individual OSLs, orientation toward the economic environment, and brand loyalty. The general discussion reviews the findings, develops practical and theoretical implications, and makes recommendations for future research.

BACKGROUND

In fall 2008, the US economy entered one of its most turbulent periods in history. September that year saw the collapse of Lehman Brothers Holdings Inc. when the 158-year-old securities trading company filed for bankruptcy, the largest such filing in the history of the United States (MarketWatch, 2008). The next day, the Dow Jones Industrial Average (DJIA) closed down more than 500 points, the largest single-day drop since the market reopened following the terrorist attacks on the United States in September 2001 (Berenson, 2008). The free fall on Wall Street led the US government to create the US$700 billion Troubled Asset Relief Program (TARP) in October that year to strengthen the financial assets of major US corporations. A month later, the DJIA closed at a new 6-year low; and by March 2009 it bottomed out at just over 6600 from its high of 14 093 in October 2007 and the 11 388 mark the previous September (DJIA, 2010).

The Wall Street collapse was predicated by a weakening of the housing marketing in the United States. According to RealtyTrac, home mortgage lenders began foreclosure proceedings on 1.3 million properties in 2007, a figure that increased to 2.3 million the next year. By August 2008, almost 10 per cent of all mortgages in the Unites States were either delinquent or in foreclosure, and between August 2007 and October 2008, almost 1 million homes were foreclosed upon (RealtyTrac, 2009).

At the same time, the Pew Research Center for Excellence in Journalism reported that the media had begun calling the prevailing economic environment a recession rather than just a mortgage crisis (Pew Research Center, 2008a), trailing only the presidential election that fall in total media coverage. The Center also found that there was a positive relationship between the quantity of media coverage on the topic and increased pessimism about the economy among US citizens. However, the Center concluded that Americans were more attuned to the economy than the media (Pew Research Center, 2008b). The increased awareness of an uncertain economy has led to changes in the way Americans spend and save their money. The US Commerce Department reported at the end of October 2009 that consumer

spending in 2008 overall was 0.9 per cent less than the previous year (Bureau of Economic Analysis, 2009). The Department also reported that Americans increased their savings to an annual rate of $355.6 billion, moving the savings rate up to 3.3 per cent from 2.8 per cent the month before. This indicates a trend that US consumers, at least, are saving more and spending less, a fact putting a strain on businesses.

For marketers, particularly brand managers who shoulder the burden of maintaining customer loyalty to the brand, this perfect storm of economic conditions, media coverage and consumer awareness creates both challenges and opportunities. At an October 2008 presentation to The Conference Board in Chicago, Sean Murphy, senior vice president for New York-based communications consultant Hill & Knowlton Inc., told the gathering, 'With fewer discretionary funds, people are going out less and staying home more. If you're in the cable or satellite dish business, or if you own value brands, this is your time' (Murphy, 2008).

LITERATURE REVIEW

The OSL framework proposes that individuals who are higher in their preferred levels of arousal are more apt to take part in sensation-seeking activities in order to maintain their required level of stimulation (Raju, 1980; Hoyer and Ridgway, 1984; Steenkamp and Baumgartner, 1992, 1995; Baumgartner and Steenkamp, 1996; Van Trijp *et al*, 1996; Burgess and Harris, 1998; Sharma *et al*, 2006). For example, high-OSL individuals are more likely to engage in exploratory activities (Raju, 1980) as they seek variety to resolve arousal discrepancies (Steenkamp and Baumgartner, 1992). Introduced in psychology research (Hebb, 1955; Leuba, 1955), OSL theory proposes that every individual prefers a specific amount of stimulation, called 'optimum stimulation', and will make adjustments in order to achieve that level of stimulation. When the level is too high, the individual will attempt to reduce it; when it is too low, the individual will attempt to increase stimulation levels.

Raju (1980) proposed that OSL and certain exogenous variables, such as employment status and income, were indicative of consumer exploratory behaviors, such as variety seeking or its counterpart, brand loyalty (Steenkamp and Baumgartner, 1992). Arguably, variables such as employment status and income are contextualized in the broader economic environment in which one resides. As such, the prevailing economic environment and an individual's orientation toward that environment are an aspect of purchase-relevant knowledge (Baumgartner and Steenkamp, 1996). An interesting but unanswered question is how individual OSL preferences, the prevailing economic environment and brand loyalty relate.

RESEARCH QUESTIONS

Depending on the broad economic environment, some consumers may find it difficult to make decisions (George, 1980). Known as 'uncertainty avoidance', this characteristic refers to the extent to which people feel threatened by ambiguous situations and create beliefs in an effort to avoid such situations (Hofstede, 1984). Those who are high in uncertainty avoidance, such as consumers who are low in OSL, seek stability, predictability and low risk rather than change and new experiences (Hofstede, 1984). Erdem *et al* (2006) found empirical evidence to support this claim in a brand preference context when they discovered that positive effect of brand credibility on choice is greater for consumers who rate high for uncertainty avoidance. Credible brands provide more value to high-uncertainty-avoidance consumers because such brands have lower perceived risk and information costs (Erdem *et al*, 2006).

In general, consumers regulate their exposure to external environmental stimulation in an effort to maintain a preferred OSL (Steenkamp and Baumgartner, 1995). Building on this assertion, we expect that a consumer's OSL bears some relationship with encountered economic conditions. One rationale is that the impact of the broad environment on exogenous factors, such as job security or income status, is considered when making adjustments to attain one's OSL. These ideas are consistent with the proposal of Raju (1980) that exogenous factors work with OSL to influence particular exploratory consumer behaviors. Another rationale focuses on how one is oriented toward the external environment. For example, a consumer may be oriented toward affective environmental stimulation whereas another is predisposed toward cognitive environmental stimulation, and either orientation ultimately relates to consumer decisions (Baumgartner and Steenkamp, 1996). The idea that these tendencies may be influenced by the external environment has been previously suggested. For example, Hoyer and Ridgway (1984) found that variety seeking may actually be influenced by the contextual environment rather than individual behavior. Considering these factors, the following research question is posed:

RQ1: Do preferred levels of stimulation (individual OSLs) have an effect on cognitive/affective orientation toward the economic environment?

In their work, Sharma *et al* (2006) found that individuals with high consumer impulsiveness and OSLs indulged in more impulse buying and variety-seeking behaviors than those who had lower amounts of those two characteristics. Among seven behavior categories, Raju (1980) found the strongest correlations between OSL and innovativeness, and OSL and risk taking, with brand switching and repetitive behavior proneness slightly less closely correlated. Applying his finding to consumer behavior, Raju concluded that individuals with high OSLs are more likely to exhibit exploratory behaviors in the form of risk taking and innovativeness, and are somewhat likely to exhibit these behaviors in brand switching. This was confirmed later by Burgess and Harris (1998) in their study that showed value priorities and OSL had important influences on brand loyalty behavior. Although these studies imply the influence of external stimuli on loyalty or variety in making brand decisions, an interesting research question remains:

RQ2: Does cognitive/affective orientation toward the economic environment and individual OSL impact brand loyalty?

Van Trijp *et al* (1996) determined that variety-seeking behavior combined with product category-level characteristics creates a situation in which consumers are more likely to seek change. Most OSL behavior studies up to that point were under the assumption that consumer brand switching was because of true variety-seeking behavior (Van Trijp *et al*, 1996). These scholars separated variety-seeking behavior based on intrinsic motivations from variety-seeking behavior based on extrinsic motivations, and determined that in numerous cases brand switching occurs not because of intrinsic rewards (that is, true variety-seeking behavior as attributed to OSL), but because they help the consumer attain or avoid 'another purchase or consumption goal' (Van Trijp *et al*, 1996). Therefore, the attainment of another purchase goal, or avoidance of the purchase altogether, can be related to external factors. The key point is that even though intrinsic and extrinsic motivations lead to a similar behavior of brand switching, the underlying causes are

different (Van Trijp *et al*, 1996). In their research, Mazursky *et al* (1987) found that switching behavior was based on intrinsic motives and extrinsic incentives, and that consumers who based their brand-switching behavior on intrinsic motivations were more likely to become brand loyal than those who based their initial brand switch on extrinsic incentives (Mazursky *et al*, 1987).

Although much effort has been focused on research to produce empirical evidence between OSL and consumer behavior, Van Trijp *et al* (1996) cautioned that it was important to recognize that behavior does not occur in isolation when it comes to real-world situations. Yet an external factor, such as the economy, has not been addressed, leading one to ask:

RQ3: Do consumers consider the state of the economy before making brand purchase decisions?

STUDY 1

The purpose of Study 1 was twofold. First, the study was designed to develop a measure of cognitive and affective orientation toward the economic environment. Second, the study was implemented to provide initial answers to the three research questions. The study was implemented in November 2009, approximately 14 months after the collapse of Lehman Brothers, 13 months after passage of the TARP bill, 8 months following the bottoming out of the DJIA and near the conclusion of a year in which the economy dominated media coverage (Pew Research Center, 2010).

Methodology

To study the role of OSL in human behavior, the 7-item version of the Change Seeker Index (CSI) as developed by Steenkamp and Baumgartner (1995) was used in an effort to have a more useful research approach than using the 95-item CSI scale originally developed by Garlington and Shimota (1964). In their reduced scale, Steenkamp and Baumgartner improved upon the psychometric properties of the original scale without sacrificing its nomological validity (Steenkamp and Baumgartner, 1995). The scale was later validated by Burgess and Harris (1998) in their study of OSL in a developing nation when it demonstrated value differences for high- and low-OSL individuals.

Brand loyalty was measured using a 3-item scale developed by Beatty *et al* (1988) and originally tested using a 9-point Likert-type scale referred to as 'brand commitment' by its creators because of its suggestion toward a behavioral dimension. The purpose of the scale is to determine the degree to which a consumer expresses commitment to a specific brand versus willingness to accept an alternative brand. The scale also provides flexibility by allowing researchers to use a product of their choosing during application of the instrument. In this study, 'shoes' was chosen as the product for respondents' brand consideration.

Scale development for measuring orientation toward the economic environment proceeded as follows. Items were developed by asking PhD students at a large public university in the southwestern United States to list beliefs, activities and feelings that reveal how they interface with the economy. After compilation of these words and phrases, and based on close examination of the data for uniqueness and commonalities, more than 40 statements were developed that could be used to describe the economy. Twelve were struck for potential redundancy, and the resulting 28 became the instrument used to measure orientation toward the economic environment.

To gather data for the exploratory study, the survey was distributed to undergraduate students in a consumer behavior class at the same university. Of the 112 students enrolled in the class, the survey was completed by 90,

representing an 80 per cent participation rate. Participants ranged from 20 to 29 years in age ($M=22.3$, $SD=1.59$) and were equally distributed across gender (50.6 per cent female). The students who participated were provided extra credit by the instructor. The survey featured a 7-point Likert-style scale for the previously mentioned constructs in OSL, brand loyalty and orientation toward the economic environment. The survey was administered in four small groups over 2 days exactly 1 week apart. The groups were existing subdivisions of the undergraduate class as created by the instructor for class projects. Administration of the survey was completed over 2 days in order to manage the testing environment. All constructs used a 7-point Likert-type scale ranging from 'strongly disagree' to 'strongly agree'. Item scores were summed within each scale to form overall indications for each of the constructs.

Results

Upon completion of gathering the data from the classroom, necessary items were reverse-coded, and the constructs for existing scales – OSL and brand loyalty – were examined individually for reliability using Cronbach's α. The OSL construct proved reliable ($\alpha=0.86$); and while the brand loyalty construct ($\alpha=0.66$) was slightly less than the 0.70 recommended for most research, it meets the threshold of 0.60 for exploratory research (Hair *et al*, 2006). In addition, because the construct was based on an instrument that has been previously used successfully (Beatty *et al*, 1988; Ahluwalia, 2000; Ahluwalia *et al*, 2002) it was determined that its reliability in this study was satisfactory.

Using exploratory factor analysis on the 28 items measuring economic orientation, a scree plot was generated with eigenvalues demonstrating the presence of two factors. A principal component factor analysis with varimax rotation was performed specifying two factors, resulting in several items cross-loading. Items were retained if they loaded 0.40 or more on one factor and did not load 0.30 or more on more than one factor (Hair *et al*, 2006). The result was a 19-item instrument, of which 11 items loaded on what was identified as an affective orientation toward the economic environment ($\alpha=0.84$) based on items that included: *When the stock market goes up, I feel better*; *I worry when the price of gas goes up*; *I get concerned when I hear that wages are being cut*; and *I don't worry about job layoffs unless it happens at the company where I work*. Another eight items loaded on what was identified as a cognitive orientation toward the economic environment ($\alpha=0.86$). Items included: *I pay attention to media stories on the economy so I can help keep my friends informed*; *I talk with my friends about the economy*; *I pay attention to economic statistics to tell how strong or weak the economy is*; and *I try to stay abreast of trends, changes or fluctuations in the state of the economy so I can make wise financial decisions* (see Table 1).

A least squares linear regression analysis was run with OSL as the independent variable and cognitive orientation toward the economic environmental as the dependent variable, with the results demonstrating a significant relationship ($R^2=0.053$, $F=4.967$, $P=0.028$). A subsequent linear regression was fitted for OSL as the independent variable and affective orientation toward the economic environment as the dependent variable, with the results showing no significance ($R^2=0.005$, $F=0.404$, $P>0.10$). Regression models were then run with the economic orientation factors as the independent variables and brand loyalty as the dependent variable. The results ($R^2=0.033$, $F=1.473$) showing no significance for cognitive orientation ($P>0.10$) and only marginal significance at the 0.10 level for affective orientation ($P=0.096$) (see Table 2).

Table 1: Environmental orientation items and factor loadings

Affective statements	
1. When the stock market goes up, I feel better	0.473
2. I think the media is a good source for evaluating the strength of the economy	0.425
3. When the economy is bad, I stick to a strict budget	0.565
4. I believe that people should change their spending habits during bad economic times	0.634
5. I believe my spending power is linked to my personal finances rather than the economy overall	0.509
6. When the price of gas drops, I feel better about the economy	0.352
7. I worry when the price of gas goes up	0.501
8. It doesn't bother me when I hear about companies filing for bankruptcy or going out of business because that's just part of a market economy's 'survival of the fittest' mentality	0.496
9. I get concerned when I hear that wages are being cut	0.590
10. I don't worry about job layoffs unless it happens at the company where I work	0.674
11. The changing price of oil doesn't matter to me because I can't do anything about it	0.538
Cognitive statements	
1. I pay attention to media stories on the economy so I can help keep my friends informed	0.694
2. I talk with my friends about the economy	0.673
3. I pay attention to economic statistics to tell how strong or weak the economy is	0.737
4. I pay attention to news reports that discuss economic issues so I can be a better consumer	0.767
5. I get bored when people talk to me about the economy	0.607
6. I enjoy discussing the economy	0.716
7. I try to stay abreast of trends, changes or fluctuations in the state of the economy so I can make wise financial decisions	0.663
8. I stay informed because my friends often ask me about the economy	0.746

Table 2: Regression results for Study 1 – single stage

Variables	*B*	*Standard error*	*Beta*	R^2	*F*	*t-value*	*P-value*
IV: OSL DV: Cognitive Environmental Orientation	0.266	0.119	0.231	0.053	4.967	2.229	0.028
IV: OSL DV: Affective Environmental Orientation	0.068	0.108	0.068	0.005	0.404	0.636	0.527
IV: Cognitive Environmental Orientation	−0.133	0.139	−0.110	0.033	1.473	−0.9611	0.339
Affective Environmental Orientation DV: Brand loyalty	0.265	0.157	0.192	—	—	0.681	0.096
IV: OSL DV: Brand loyalty	0.557	0.136	0.400	0.160	16.714	4.088	0.000

Notes: IV=Independent Variable; DV=Dependent Variable

In light of the literature on the relationship between OSL and brand loyalty, a linear regression was performed with OSL as the independent variable and brand loyalty as the dependent variable. Just as Raju (1980) had discovered, the model showed significance ($R^2 = 0.160$, $F = 6.714$, $P < 0.000$), demonstrating a positive relationship between the constructs.

To further our understanding of these findings, a two-stage least squares regression model was run using the OSL-brand loyalty

Table 3: Regression results for Study 1 – two-stage

Variables	*B*	*Standard error*	*Beta*	R^2	*F*	*t-value*	*P-value*	R^2 *change*	*F change*
Model 1 IV: OSL DV: Brand loyalty	0.557	0.136	0.400	0.160	16.714	4.088	0.000	—	—
Model 2 IV: OSL	0.607	0.137	0.435	0.212	7.716	4.424	0.000	0.052	0.063
Cognitive Environmental Orientation	−0.260	0.129	−0.214	—	—	−2.017	0.047	—	—
Affective Environmental Orientation	0.279	0.142	0.203	—	—	1.954	0.054	—	—
DV: Brand loyalty									

Notes: IV=Independent Variable; DV=Dependent Variable

model as the first stage, and a second regression adding the two orientations toward the economic environment factors to the existing model as additional independent variables. A significant ($P=0.052$) change in the R^2 (0.160–0.212) was observed and also a marginally significant ($P=0.063$) change in the F-statistic (see Table 3). However, the most important change was in the significance of the orientation toward the economic environment factors. In model 2 (orientation toward the economic environment and OSL as independent variables with brand loyalty as the dependent variable) the cognitive orientation toward the environment became significant ($P=0.047$) as did the affective orientation toward the environmental ($P=0.054$), while the OSL–brand loyalty relationship remained significant ($P<0.000$). This would indicate that not only does orientation toward the economic environment play a role in the OSL–brand loyalty relationship, but it also must be accounted for when brand loyalty is considered.

Discussion – Study 1

Study 1 yielded reasonable scales with which to measure cognitive and affective orientations toward the economic environment. Regarding Research Question 1 – *Does individual OSL have an effect on cognitive/affective orientation toward the economic environment?* – the results showed significance only for the effect of OSL on cognitive orientation toward the economic environment and not on affective orientation. Research Question 2 asked *Does cognitive/affective orientation toward the economic environment and OSL affect brand loyalty?* When the R^2 of model 1 in which OSL was the independent variable and brand loyalty was the dependent variable was compared to model 2, where OSL and the two orientation factors were independent variables and brand loyalty was the dependent variable, there was a significant change in the R^2 (from 0.160 to 0.212). These results suggest that the different orientations toward the economic environment and OSL have an effect on brand loyalty. As for Research Question 3 – *Do consumers consider the state of the economy before making brand purchase decisions?* – the findings of Study 1, in which model 2 showed significance for cognitive and affective orientations toward the economy, support the idea that consumers do indeed take the current economic environment and brand loyalty into consideration when making purchase decisions.

STUDY 2

While the results of Study 1 produced a viable measure of orientation toward the

economic environment and supported the notion that consumers account for the economy when making brand loyal purchase decisions, it is quite possible that the undergraduate student population sampled is not as attuned to the economy as a non-student population (Cole *et al*, 2008). Thus, the central purpose of Study 2 was to strengthen the findings of Study 1 by sampling a population of consumers who are arguably more in touch with the impact of the economy on their daily lives. Data were collected in July 2010, 16 months after the DJIA reached bottom, and 6 months following the conclusion of a year – 2009 – in which the economy was the story that received the most media coverage the previous year (Pew Research Center, 2010).

Methodology

Study 2 was developed using the same instrument, but administered in an online setting using a popular social networking site and email invitations to access a non-student sample. A URL link was provided, and invitees were given 1 week to click the link and complete the survey. No incentive was provided to the potential sample group. A total of 64 individuals participated in the online survey, a sample size that exceeds the 50 recommended by Hair *et al* (2006) for regression analysis. Participants ranged in age from 18 to 73 years ($M = 45.5$, $SD = 12.79$) and were equally distributed across gender (53.1 per cent female).

Results

As in Study 1, items were reverse-coded and constructs were examined individually for reliability using Cronbach's α, with each construct demonstrating acceptable reliability. The OSL construct had had the same reliability ($\alpha = 0.86$) as Study 1, while the brand loyalty ($\alpha = 0.77$) improved. The 11 items that constituted the affective orientation toward the economic environment ($\alpha = 0.70$) and the 8 items that identified the cognitive orientation toward the environment ($\alpha = 0.87$) were also determined to be reliable.

Regression analyses was performed in Study 2 to parallel those of Study 1. The results not only confirmed the effect of the economic environment on brand loyalty but also indicated a potential shift in how consumers consider the economy. Neither the relationship between cognitive orientation toward the economic environment and OSL nor the relationship between affective orientation and OSL was significant. As in Study 1, environmental cognitive and environmental affective responses were then analyzed as the independent variables to examine the relationship with brand loyalty as the dependent variable. Unlike Study 1, in which cognitive orientation was not significant and affective orientation was marginally significant, Study 2 results showed significance for cognitive orientation toward the economy ($R^2 = 0.104$, $F = 7.215$, $P = 0.009$) and no significance for affective orientation (see Table 4). Once again, the relationship between OSL and brand loyalty was examined via a linear regression model, with OSL as the independent variable and brand loyalty as the dependent variable; and once again, the model showed significance ($R^2 = 0.060$, $F = 3.962$, $P = 0.051$).

Finally, as in Study 1, a two-stage least squares regression model was fitted using the OSL–brand loyalty model as the first stage, and a second regression in which both cognitive and affective orientation were added to the model as independent variables. The results not only confirmed Study 1 but provided additional insights.

Similar to the first study, the change in R^2 in Study 2 (from 0.060 to 0.201) was significant ($P = 0.003$) as was the change in the F-statistic ($P = 0.008$). OSL also

Table 4: Regression results for Study 2 – single stage

Variables	*B*	*Standard error*	*Beta*	R^2	*F*	*t-value*	*P-value*
IV: OSL DV: Cognitive Environmental Orientation	0.079	0.126	0.079	0.006	0.394	0.627	0.533
IV: OSL DV: Affective Environmental Orientation	−0.074	0.090	−0.104	0.011	0.673	−0.820	0.415
IV: Cognitive Environmental Orientation DV: Brand loyalty	−0.478	0.178	−0.323	0.104	7.215	−0.286	0.009
IV: Affective Environmental Orientation DV: Brand loyalty	−0.270	0.262	−0.130	0.017	1.069	−0.1034	0.306
IV: OSL DV: Brand loyalty	0.361	0.182	0.245	0.060	3.962	1.990	0.051

Notes: IV=Independent Variable; DV=Dependent Variable.

Table 5: Regression results for Study 2 – two-stage

Variables	*B*	*Standard error*	*Beta*	R^2	*F*	*t-value*	*P-value*	R^2 *change*	*F change*
Model 1 IV: OSL DV: Brand loyalty	0.361	0.182	0.245	0.060	3.962	1.990	0.051	—	—
Model 2 IV: OSL	0.448	0.174	0.304	0.201	5.046	2.572	0.013	0.141	0.008
Cognitive Environmental Orientation	−0.703	0.225	−0.475	—	—	−3.129	0.003	—	—
Affective Environmental Orientation	0.420	0.316	0.202	—	—	1.328	0.189	—	—
DV: Brand loyalty									

Notes: IV=Independent Variable; DV=Dependent Variable.

maintained significance ($P=0.013$). Unlike Study 1 in which cognitive orientation and affective orientation toward the economic environment were significant ($P=0.047$ and $P=0.054$, respectively), Study 2 showed significance for the cognitive orientation ($P=0.003$) and no significance for the affective orientation ($P=0.189$). In fact, the cognitive orientation was negatively related ($\beta=-0.703$, $t=-3.129$), suggesting that the non-student consumers with a cognitive orientation are less likely to remain brand loyal, at least during the present economic conditions (see Table 5). Although some research has suggested that older consumers become more brand loyal out of habit (Cole *et al*, 2008), additional research also indicates that socio-emotional and financial information can motivate older adults to deploy a cognitive perspective (Castel, 2005). For example, in their study, Agarwal *et al* (2009) found that middle-aged banking customers

who secure loans make fewer financial mistakes than consumers who are both younger and older.

Discussion – Study 2

The findings of Study 2 lend support to the utility of the measures of cognitive and affective orientations toward the economic environment in a non-student population. Applying the results of Study 2 to the research questions indicates that OSL does not directly affect either the cognitive or affective orientation toward the economic environment, making the answer 'no' to Research Question 1. Research Question 2 asked whether one's orientation toward the economy and OSL affected brand loyalty. Findings of Study 2 suggest that OSL and cognitive orientation toward the economic environment, but not affective orientation, have an impact on brand loyalty. This may indicate that a restraining influence on brand loyalty is staying abreast of economic trends and events, at least among the older, non-student consumers. Finally, Research Question 3 asked whether consumers consider the state of the economy before making brand purchase decisions. Because of the significance in changes from model to model, from the perspective of Study 2, the answer must be 'yes'.

CONCLUSIONS AND GENERAL DISCUSSION

This research began with the general question of whether the prevailing economic environment has an effect on the OSL–brand loyalty relationship. Subsequently, the study asked whether consumers' cognitive and affective orientation toward the economic environment based on an individual's OSL had an effect on brand loyalty. Two studies were employed in an attempt to answer these questions, with both studies confirming that consumers do consider the present economic conditions when making brand loyalty decisions. However, interesting differences were discovered when the median age of the sample size changed.

In Study 1, a sample of undergraduate students ($M = 22.3$) found no significant relationship between cognitive orientation toward the economic environment, and only marginal significance for affective orientation, when it came to brand loyalty. However, in Study 2, a sample of non-students ($M = 45.5$) provided results that found the cognitive orientation toward the environment was significant while the affective orientation was not. One could conclude that as experience dealing with the effects of the economic environment increases, the reliance on a cognitive approach to deal with that environment increases while affective approaches decrease. In other words, the more real-world experience one has – perhaps relating to finding and holding employment, with existing financial obligations that come along with car and home ownership, or considering future financial needs for retirement – the more it increases their dependence on awareness of economic factors.

The difference in approach to consideration of economic conditions remained when the present economic environment was considered by consumers. While both studies demonstrated that consumers do take economic factors into consideration when debating brand loyal purchases, the student sample from Study 1 showed equal significance for using both cognitive and affective orientation, whereas the non-student sample from Study 2 demonstrated a stronger significance for cognitive orientation, but none for affective orientation. In fact, the relationship for the older sample was negative, indicating the possibility for brand switching by consumers with more real-world experience when they consider the present economic environment. This may suggest that other internal (for example, price consciousness) or external (for example, marketing promotions) factors

take precedence over brand loyalty when experienced consumers evaluate purchase decisions in light of economic conditions. Determination of these factors was beyond the scope of this study, but does provide opportunity for future research.

In both a student and a non-student sample, the research questions were confirmed when the two competing models showed significant improvement when the environment was considered. Therefore, it becomes even more pertinent now to conduct additional research on the external affects to these constructs. For marketing practitioners, the results demonstrate that when consumers are aware of the economic environment, adjustments should probably be made to take into consideration how consumers are feeling or thinking about present conditions. Therefore, when statistical evidence is provided that shows consumers, in general, believe that present economic conditions are not favorable – as could be ascertained from the Consumer Confidence Index issued monthly by The Conference Board – practitioners may consider focusing on short-term promotional efforts that provide cost savings for their loyal customers. However, those efforts should be designed to end when it is publicly accepted that the current economy has improved. Discounted pricing strategies and bonus offers may also go a long way toward maintaining brand loyalty among consumers when the economic environment is considered unfavorable.

These promotional efforts should be exercised with some caution, however, particularly for brands that emphasize or stand for high quality and luxury because of the potential for lowering their brand equity. Yet, when the majority of consumers consider the economy to be challenging, clever marketing managers could coordinate messaging to inform consumers that promotions are temporary during the prevailing economic environment, and that price, not quality or luxury, has been reduced in the interest of the consumers. Finally, practitioners may also consider attempting to establish a new cohort of brand-loyal customers among younger consumers who appear to use cognitive and affective approaches to making purchase decisions when they consider the economic environment. If younger audiences are cognizant of the economy, marketing managers may attempt to reinforce prevailing public opinion of the economic condition through their marketing messages. For example, if a majority of consumers consider the economy unfavorable, practitioners could communicate that point through advertising targeted toward a younger audience while simultaneously appealing to both their thoughtful and emotional needs.

For researchers, ample opportunities exist for advancing these findings. For example, the regulatory focus framework could be applied to examine the role of individual OSLs in influencing brand responses. Those with a promotion focus are quite sensitive to positive outcomes and features, while those with a prevention focus are sensitive to negative outcomes and features (Higgins, 1997). Research should consider the potential moderating role of OSL on the relationship between regulatory focus and brand loyalty when consumers consider the prevailing economic environment to be challenging. It may be that an individual with a high OSL and a chronic prevention focus will be less inclined to be brand loyal and switch to a cheaper brand in lean times, given the focus on negative features and outcomes. Another avenue for further study should examine the role of anticipatory emotions, such as hope and fear, on the relationship between individual OSLs and brand loyalty when consumers consider the prevailing economy. It may well be that anticipatory form or goal-directed behaviors will push consumers toward brand loyalty for those guided by hope and low OSLs (Baumgartner *et al*, 2008).

The statistical evidence on the economy combined with this exploratory research suggests that there is a need to re-examine the OSL–brand loyalty relationship and its effects on brand decision making under a variety of external environmental conditions. Further, it indicates that both cognitive and affective responses to the environment should be explored. The findings of this initial investigation introduce the potential for the OSL framework to enhance our understanding of a range of brand-related responses to almost any environment that consumers may consider – whether it be economic, political or cultural.

As the research has confirmed, there is a strong relationship between OSL and brands. However, external factors and how individuals respond to them also play a key role in consumer brand decisions. It becomes pertinent now to conduct additional research on the external effects on these well-developed constructs. Also important from this study is the development of a potential new scale to test the cognitive and affective response to the environment. Following confirmatory factor analysis, future studies could leverage this as an instrument to introduce different environmental aspects – positive/negative economic conditions, natural disasters, national security, positive/negative international relations, political stability/uncertainty, military action and so on – that consumers may consider in making brand purchase decisions in order to examine their response. Regardless of what external environmental element is considered, however, it seems clear that the relationship of OSL and brand preference can no longer be examined in a vacuum.

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