



Contents lists available at ScienceDirect

## Journal of Business Research



# Understanding consumer motivations to interact on brand websites in the international marketplace: Evidence from the U.S., China, and South Korea

Dana L. Alden<sup>a,\*</sup>, James B. Kelley<sup>b</sup>, James B. Youn<sup>a</sup>, Qimei Chen<sup>a</sup>

<sup>a</sup> Shidler College of Business, University of Hawai'i, United States

<sup>b</sup> College of Business and Economics, United Arab Emirates University, United Arab Emirates

## ARTICLE INFO

## Article history:

Received 21 August 2015

Received in revised form 29 April 2016

Accepted 30 April 2016

Available online xxxx

## Keywords:

Brand strategy

Brand website

Brand community

International

Internet marketing

## ABSTRACT

Brand websites provide opportunities for levels of interactivity that increase the potential for innovative co-creation between consumers and firms. However, little is known about predicting consumer interaction levels on brand websites in markets outside of North American and Europe. Adult consumers in the U.S., China, and South Korea responded to a survey measuring theory-based social and brand-based antecedents of brand website interaction frequency. In all countries, respondents who viewed brands as integral parts of self-concept also interacted more on brand websites. This relationship was mediated by consumers' strength of identification with brand websites as communities. Susceptibility to social normative influence and a positive attitude toward materialism were important predictors of consumer interactions in all countries. Overall, this study found stronger cross-national similarities than differences. Implications emphasize recommendations related to the potential challenge and value of increasing consumer interactions on brand websites in Western and East Asian markets.

© 2016 Published by Elsevier Inc.

## 1. Introduction

As Puligadda, Ross, and Grewal (2012, pp. 115) note, "The intriguing possibility that consumers differ inherently in the way they interact with brands has received scant attention." At the same time, consumer interactions with firms that result in shared brand meanings and uses have the potential to enhance brand value (Pralhad & Ramaswamy, 2004). Such brand–consumer encounters increasingly occur on corporate and social media brand websites that enhance firms' abilities to "foster relationships and interact with consumers" (De Vries, Gensler & Leeftang, 2012, pp. 83). Consequentially, many companies are harnessing the power of co-creation through development of online communities that build connections between brand users and management (Wu & Fang, 2010).

Recent research suggests simply increasing interactions between firms and consumers in online or offline brand communities can lead to null or even negative outcomes (Algesheimer, Dholakia & Herrmann, 2005; Homburg, Ehm & Artz, 2015). However, given growing use of the Internet for both brand information and expression of brand opinions (Dellarocas, Zhang & Awad, 2007; De Vries et al., 2012), proactive management of online interactions is increasingly important to firms' long-term successes. (Asmussen, Harridge-March, Occhicupo & Farquhar, 2013). Central to successful management of such interactions is an understanding of factors motivating consumers

to act as brand development partners, rather than passive recipients of company offers (Kucuk & Krishnamurthy, 2007),

In line with this objective, researchers have identified individual difference antecedents associated with higher levels of consumer participation in online communities and brand websites. For example, Teichmann, Stokburger-Sauer, Plank, and Strobl (2015) report that higher valuation of opinion leadership, self-presentation, enjoyment, and altruism is associated with higher participation in three Austrian online communities. Pentina, Gammoh, Zhang, and Mallin (2013a) find that U.S. and Ukrainian consumers, who more deeply assimilate brands as reflections of their self-concepts, have stronger intentions to engage with brands on Twitter and Facebook. Kelley and Alden (forthcoming) conclude that individual differences in brand website interaction levels are influenced by a network of antecedents and mediators such as susceptibility to normative influence (SNI; Bearden, Netemeyer & Teel, 1989), brand self-concept linkages (Sprott, Czellar & Spangenberg, 2009), purposive motives (Dholakia, Bagozzi & Pearo, 2004), and opinion leadership (Huffaker, 2010).

To date, most of this research has either taken place in Western markets or has emphasized theoretical models developed in Western cultures (e.g., Ren et al., 2012). As a result, understanding of factors motivating consumers to interact on brand websites in non-Western markets remains limited. Two notable exceptions are relevant. First, Tsai and Bagozzi (2014) report that social identity and group norms (emotions and attitudes) are more important motivators of desire to contribute to online friendship groups in Taiwan for study participants with weaker (stronger) self-reliance values. Second, Wu, Huang, Zhao

\* Corresponding author.

E-mail address: [dalden@hawaii.edu](mailto:dalden@hawaii.edu) (D.L. Alden).

and Hua (2015) find that purchase frequency increases as Chinese consumers participate more in online brand communities, but then flattens at higher participation levels for consumers whose self-regulatory focus is not promotion oriented (Chatterjee, Roy & Malshe, 2011).

Despite such valuable advances, further research is needed to identify individual difference factors motivating consumers to interact with other consumers and firms on brand websites in markets outside of North America and Europe. In addition to the important theoretical contributions accompanying cross-national testing of marketing theory (Engelen & Brettel, 2011), empirical investigations of consumers in foreign markets assist managers who increasingly promote their brands globally (Steenkamp & de Jong, 2010) in highly competitive markets with large numbers of web users. For example, the number of Internet users in China and South Korea in 2014 was almost three times that in the United States (558 versus 191 million, Statista, 2014). Extending the stream on motivational factors leading to higher levels of consumer interactions on brand websites (CIBW) and building on Tsai and Bagozzi (2014) as well as Wu, et al. (2015), this study analyzes social and brand-related motivations for interactions with firms and other consumers on brand websites in the U.S., China, and South Korea. In addition, given well-known differences across the Western and Eastern cultures (e.g., collectivist versus individualist values; Hofstede, 2001), this study explores the extent to which culture-level differences moderate hypothesized effects on consumer tendencies to interact on brand websites. The paper concludes with theoretical implications and managerial recommendations for increasing CIBW in diverse markets.

## 2. Conceptual framework

### 2.1. Brand-related and social predictors of interaction frequency on brand websites – the role of self-knowledge theory

Brand websites are potentially valuable marketing tools providing powerful opportunities for cultivating customer relationships (Mangold & Faulds, 2009; Zaglia, 2013). Related research has focused on goal-oriented motivations for engagement (Dholakia et al., 2004), self-presentation (Simmons, 2008), learning through knowledge transfer (Jayanti & Singh, 2010), socialization (Bagozzi & Dholakia, 2002), recreation (Molesworth & Denegri-Knott, 2007), and online community culture formation (Deighton & Kornfeld, 2009). Studies of CIBW have examined consumers' transactional behaviors in online settings (Bolton & Saxena-Iyer, 2009; Wu & Fang, 2010). In this context, participants accomplish specific tasks, such as solving problems, developing ideas, and influencing others (Dholakia et al., 2004). Based on analyses of the social networking site *Twitter*, researchers report that some brands intentionally attempt to co-create brand-related narratives with consumers (Kozinets, De Valck, Wojnicki & Wilner, 2010). Other research suggests strong admirers of certain brands desire to interact with other users and the firm directly (Porter, Donthu, MacElroy & Wydra, 2011). Higher interaction levels are indicated when consumers report frequent communication of thoughts to the company and/or other brand users via one or more brand websites (Wu & Fang, 2010).

With this overview in mind, we now offer the theoretical rationale for our proposed nomological network of antecedents to higher levels of CIBW. In selecting constructs of interest, we are guided by “self-knowledge theory,” which states that individuals are “assumed to construct self-concepts from their unfolding life experiences” in “selective, inventive, and creative” ways (Markus, 1983, pp. 543). Self-schemas are central to self-knowledge theory and are defined as “knowledge structures about the self that derive from past experience and that organize and guide the processing of self-relevant information contained in the individual's social experiences” (Markus 1983, pp. 547; see also Forehand, Deshpande & Reed, 2002; Wheeler, Petty & Bizer, 2005). Thus, in this study, we draw on self-knowledge theory, hypothesizing that social and brand-related self-schemas play important roles in

differentially motivating consumers' interactions on brand websites with firms and other consumers.

First, two social self-schema which are frequently used in cross-national research (Alden, Steenkamp & Batra, 2006) and which reflect social self-schema studied in the brand community context (Dholakia et al., 2004) are tested as exogenous higher-level constructs: social normative influence (Bearden et al., 1989) and materialism (Richins, 2004). The constructs are modeled as higher-level antecedents that exert their influences on CIBW through two more concrete, brand-related endogenous mediators. These self-schema constructs are “brand engagement self-concept” (BESC; Sprott, et al., 2009), which measures the extent to which consumers incorporate brands as integral and important aspects of their self-schema and “identification with brand websites as communities,” which taps into consumers' tendencies to view brand websites as social communities where belongingness needs are potentially satisfied (Stokburger-Sauer, Ratneshwar & Sen, 2012; Tuškej, Golob & Podnar, 2013; Van Doorn et al., 2010). Furthermore, purposively sampling from the U.S. as the baseline Western culture in which individual difference antecedents and tendencies to interact on brand websites have been most thoroughly examined, this study examines the boundary conditions of existing research by conducting additional studies in two East Asian markets: China and South Korea. Thus, H1–H5 propose main effect relationships expected to be found in all three countries, while H6a–H6c address possibilities of cultural moderation of the strength of main effect relationships within the proposed nomological network.

## 3. Hypothesis development

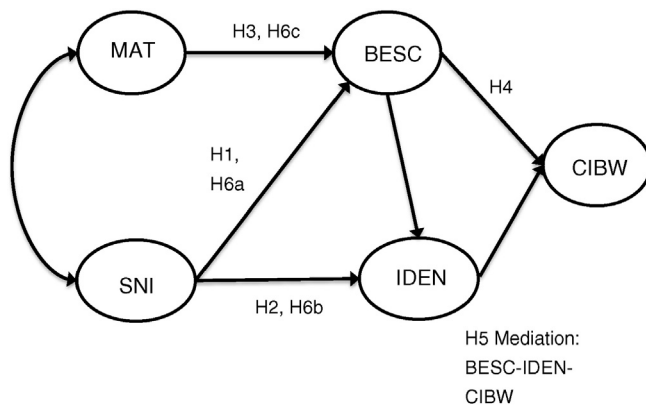
### 3.1. Exogenous social self-schema hypotheses

SNI reflects a consumer's tendency to learn from others and to conform to others' expectations regarding appropriate consumption in order to enhance self-image (Bearden et al., 1989). The construct also indicates the extent to which consumers “identify with a group to enhance their self-image and ego” (Batra, Homer & Kahle, 2001, pp. 116). Brand-related attitudes and behaviors are central to the conceptualization of the construct as well as its measurement in consumer psychology (Batra et al., 2001; Bearden et al. 1989). From such research, it is reasonable to predict that brands and brand information developed and stored within self-schema will be more accessible to high versus low SNI consumers.

Sprott et al. (2009) propose and validate a construct they refer to as brand engagement in self-concept (BESC; see Appendix A). BESC measures how central brands are to consumers' self-schema. The role of BESC in the model is also supported by self-knowledge theory, as consumers may use brands to reinforce their understandings and expressions of individual self-concepts (Fournier, 1998). Escalas and Bettman (2005) suggest that consumers form brand attachments that build self-concepts and align with their self-images. Sprott et al. (2009) report positive associations between BESC and self-brand memory links, liking of brand logos, and preferences for higher priced products from their favorite brands. Given the importance of brands as self-image enhancement vehicles, high SNI consumers are also likely to have higher BESC. This prediction leads to our first hypothesis (see Fig. 1).

**H1.** Higher levels of SNI are associated with higher levels of BESC in the U.S., China, and South Korea.

As noted, consumers form brand attachments in line with their self-concepts (Escalas & Bettman, 2005). Furthermore, brand websites that allow C2B, B2C, and/or C2C interactions provide ready-made sources of information about the brand-norms of consumers active on the site. For this reason, highly interactive consumers who are high on SNI should be more likely to extend their self-concepts to include knowledge of associations with brand websites as communities. As a result,



**Fig. 1.** Self-Schema Model of Consumer Interactions on Brand Websites BESC: brand engagement self-concept CIBW: consumer interactions on brand websites IDEN: identification with brand websites as communities MAT: materialism SNI: social normative influence.

the direct path between SNI and community identification should also be positive. This suggests our second hypothesis.

**H2.** Higher levels of SNI lead to higher levels of identification with brand websites as communities in the U.S., China, and South Korea.

Materialism refers to centrally held beliefs regarding the importance of possessions across multiple arenas (Richins & Dawson, 1992). Materialistic consumer value items that can be publicly displayed (Richins, 1987). Related research focuses on the types of brands materialists prefer, including prestigious brands that are often global (Rindfleisch, Burroughs & Wong, 2009). Materialistic consumers have stronger online brand connections (Rindfleisch et al., 2009), higher levels of brand loyalty (Podoshen & Andrzejewski, 2012), heightened senses of self-monitoring (Browne & Kaldenberg, 1997), and more frequent CIBW (Wallace, Buil, de Chernatony & Hogan, 2014). Thus, more materialistic consumers should place greater importance on brands in terms of defining and reinforcing their self-concepts, leading to a positive relationship between materialism and BESC.

**H3.** Higher levels of materialism lead to higher levels of BESC in the U.S., China, and South Korea.

Materialists believe that “acquiring things will make them happier, and they tend to act on this belief by buying more” (Richins, 2013, pp. 1). However, there is no a priori reason for hypothesizing that higher levels of materialism will extend beyond stronger incorporation of brands within self-concept (BESC). Materialists are, by definition, interested in “acquiring things.” Thus, materialists may more strongly associate “things” with their brand-based self-concepts (H3), but it is unlikely they will more strongly identify with brand websites as social communities. Indeed, our review of the literature indicated that materialism has rarely, if ever, been included as an antecedent to brand community identification and participation (see Bagozzi & Dholakia, 2006). For this reason, a path from this materialism to the identification construct is not predicted. However, for completeness, rival models with this path and others that are not hypothesized will be tested.

### 3.2. Endogenous brand-related self-schema hypotheses

We now turn to endogenous (brand-related) as opposed to exogenous (social) self-schema antecedents to higher levels of CIBW. Pentina, Zhang, and Basmanova (2013b) find that higher BESC consumers in the U.S. and Ukraine have stronger intentions to follow brands on Twitter. Additionally, Pentina, et al. (2013a) find that BESC is positively associated with intentions to engage with brand websites on Twitter and Facebook. Overall, these results suggest that consumers

who integrate brands within their self-schema are more likely to seek reinforcement through increased interactivity with these brands and other brand users. Because brand websites provide accessible and low cost mechanisms for self-knowledge reinforcement through interactivity, higher BESC consumers are likely to report higher levels of CIBW suggesting the following direct effect hypothesis.

**H4.** Higher levels of BESC lead to higher levels of CIBW in the U.S., China, and South Korea.

BESC and identification with brand websites as communities are both rooted in consumers' self-schemas and involve strong personal associations with brands and the communities that may form around them. Individuals with higher BESC should experience increased stronger feelings of identification with brand websites as communities of like-minded consumers. Thus, we hypothesize that higher BESC increases the likelihood of identification with brand websites as communities. Furthermore, based on the work of Stokburger-Sauer et al. (2012), Tuškej et al. (2013), and Van Doorn et al. (2010), identification with brand websites as communities is likely to mediate the relationship between BESC and CIBW.

Prior research suggests that social identity involves cognitive and affective dimensions (Bergami & Bagozzi, 2000; Bhattacharya & Sen, 2003). When the affective dimension is satisfied, consumers believe their social belongingness is fulfilled, and this strengthens identification with the group (Dholakia et al., 2004). Increased cohesion reinforces shared core community values (Carlson, Suter & Brown, 2008) leading to stronger group bonds (Chang, Hsieh & Lin, 2013; Novak, Hoffman & Yung, 2000). Van Doorn et al. (2010) describe high CIBW consumers as having perceived control over their interactivity, having their curiosity aroused, and having interactions that are intrinsically interesting. Such high need satisfaction levels suggest that consumers who strongly identify with brand websites as communities are likely to interact at the highest levels. This assumption is supported by Algesheimer et al. (2005), who found that brand community identification positively impacted consumer interactions on brand websites. Thus, stronger identification with brand websites as communities should lead to higher CIBW. Given H4 and H5, complementary mediation (both direct and indirect effects on CIBW; Zhao, Lynch & Chen, 2010) is predicted.

**H5.** Identification with brand websites as communities positively mediates the effect of BESC on CIBW in the U.S., China, and South Korea.

### 3.3. Cross-cultural moderation hypotheses

The relatively stronger influence of collectivism on attitudes and behaviors in East Asian versus U.S. culture is well-documented (Hofstede, 2001). Thus, one could reasonably argue consumers in East Asian markets would have enhanced accessibility to self-schema such as SNI that are thought to be positively reinforced by collectivist values (Riemer, Shavitt, Koo & Markus, 2014). However, Yim, Sauer, Williams, Lee, and Macrury (2014) find that vertical collectivism and vertical individualism are both positively related to SNI in Taiwan and the U.S. Horizontal collectivism, on the other hand, is negatively related to SNI in both cultures. Furthermore, in both countries, higher SNI is positively related to brand consciousness, a construct with items such as “I believe brands I buy are a reflection of who I am” that appear likely to correlate strongly and positively with BESC. Thus, while the findings of Yim et al. (2014) support a direct effect between SNI to BESC (H1 in this study), their research suggests the existence of stronger collectivist norms in China and South Korea versus the U.S. may not differentially affect the strength of the path between SNI and BESC. Keeping in mind the limitations of testing predictions at the cultural level (Robinson, 1950), we hypothesize the following:

**H6a.** SNI will not exert a stronger positive influence on BESC in China and South Korea than in the U.S.

On the other hand, Tsai and Bagozzi (2014) found that value placed on social identity and group norms positively impacted “contribution desire” for Taiwanese online friendship community participants, who were low on self-reliance. Assuming that self-reliance, a dimension of individualism (Triandis, McCusker & Hui, 1990), is generally lower in China and South Korea versus the U.S., it is possible that SNI, associated with greater emphasis on social identity and group norms, will more strongly influence identification with brand websites as communities in East Asian countries, leading to our next hypothesis:

**H6b.** SNI will exert a stronger positive influence on identification with brand websites as communities in China and South Korea than in the U.S.

Finally, research suggests that the influence of materialism on marketing-related outcomes across cultures is relatively invariant (Cleveland, Laroche & Papadopoulos, 2009). However, Sharma (2010) finds that materialist consumers in emerging markets tend to have more favorable attitudes toward products imported from developed, versus developing, countries. In addition, Workman and Lee's (2011) research suggests the possibility that specific dimensions of materialism may vary across cultures even when the overall construct does not. Nonetheless, as with SNI, culture-related theory and research suggesting a stronger relationship between materialism and BESC in East Asia versus the U.S. is lacking. For this reason, culture is not expected to moderate the relationship of materialism on BESC.

**H6c.** Materialism will not exert a significantly stronger effect on BESC in China and South Korea than in the U.S.

## 4. Methods

### 4.1. Sample, data collection and measures

Data were collected using online consumer panels of respondents between 25 and 45 years of age who “agreed” or “strongly agreed” that they both interacted and exchanged information with other consumers on brand websites. Limiting the sample to respondents who described themselves as interactive on brand websites provides insight into the motivations of those who are more likely to be online “leaders” as opposed to “readers” (Andersen, 2005) and “contributors” as opposed to “browsers” (Preece & Shneiderman, 2009). Thus, the consumers sampled likely have influence which extends to less or non-interactive consumers, individuals who still read posts and who are often influenced by such word-of-mouth information (Andersen, 2005; Madupu & Cooley, 2010; Preece & Shneiderman, 2009). Respondents also passed an attention screen question and spent at least 5 min answering survey questions. These procedures resulted in samples with similar age, gender, and income distributions: 206 in the U.S. (mean age 35; 57% male); 187 in China (mean age 31; 52% male); and 207 in South Korea (mean age 28; 52% male).

The measure of CIBW was adapted from Wu and Fang (2010). BESC was measured using Sprott et al.'s (2009) 8-item scale. Identification with brand websites as communities was adapted from Algesheimer et al.'s (2005) 5-item scale. SNI was measured using 8-items that comprise the normative dimension of Bearden et al.'s (1989) scale. Finally,

materialism was gauged using Richins' (2004) 9-item scale (see Appendix A). Questionnaires were double-back-translated from English to Chinese/Korean. Inconsistencies were resolved through discussion.

### 4.2. Measurement model

Scale validity was investigated using CFA. Measurement issues led to the removal of items that fell below the 0.50 latent factor loading threshold (Hair, Black, Babin & Anderson, 2010) or that violated invariance across the three countries (Steenkamp & Baumgartner, 1998; see Appendix A and Table 1). This is a common approach used in multi-group SEM as larger numbers of reflective items on latent constructs may produce poor fit and, therefore, are “not necessarily better” (Hair et al., 2010, pp. 676). This approach strengthened the measurement model ( $\Delta\chi^2$  was significant;  $p > 0.05$ ) without significantly affecting construct validity (i.e., correlations between initial and revised scales were between 0.87 and 0.99). All composite reliabilities exceeded 0.70, indicating good internal consistency (see Table 2). AVE scores exceeded 0.50 and the latent constructs' squared correlations, demonstrating convergent and discriminant validity (Fornell & Larcker, 1981; see Table 3). In addition, we ran a model with items loading on their latent factors and a common method factor to check for common method bias or CMB (Podsakoff, MacKenzie, Lee & Podsakoff, 2003; Tsai & Bagozzi, 2014). The results of this analysis indicated that all deltas were less than 0.20, suggesting minimal CMB.

Finally, prior to estimating the structural model, we assessed measurement invariance across the three countries (Steenkamp & Baumgartner, 1998). Configural invariance was first established for the measurement model ( $\chi^2[435] = 757$ ,  $p < 0.05$ ; CMIN/df = 1.74; TLI = 0.96; CFI = 0.95; SRMR = 0.05; and RMSEA = 0.04). Next, constraining all factor loadings to be equal across the three countries did not significantly worsen fit in comparison to the configural model ( $\Delta\chi^2 = 28$ ,  $p > 0.24$ ;  $\chi^2[463] = 796$ ,  $p < 0.05$ ; TLI = 0.96; CFI = 0.95; SRMR = 0.05; and RMSEA = 0.03). Thus, invariance was established at the metric level meaning that metric invariance can be assumed across the three countries, enabling cross-national comparisons of unstandardized path coefficients (Steenkamp & Baumgartner, 1998).

### 4.3. Hypothesized model versus competing models

Fit for the hypothesized structural model specified in Fig. 1 was very strong ( $\chi^2[435] = 703$ ,  $p < 0.05$ ; CMIN/df = 1.62; TLI = 0.96; CFI = 0.97; SRMR = 0.04; and RMSEA = 0.04). Before testing hypotheses, determining the proposed model fits better than other reasonable models is important. Because brands are used to identify with groups (Zhang & Khare, 2009) and are often displayed as symbols of material success (Han, Nunes & Drèze, 2010), a competing model was specified with additional direct paths from materialism and SNI to identification and CIBW, SNI to CIBW, and identification to CIBW. Model fit did not significantly improve relative to the proposed model in Fig. 1 ( $[\Delta\chi^2] = -9$ ,  $p > .35$ ). As expected, the path from materialism to identification was insignificant in all three countries. Furthermore, the path from materialism to CIBW was significant only in China, and the path from SNI to CIBW was significant only in the U.S. Finally, in the hypothesized model, identification with brand websites as communities predicts CIBW. However, one could argue that the relationship between these

**Table 1**  
CFA measurement descriptive properties of factor scales.

Constructs	U.S. Mean (SD)( $\alpha$ )	China Mean (SD)( $\alpha$ )	S. Korea Mean (SD)( $\alpha$ )
Brand engagement self-concept (BESC)	5.0 <sup>1</sup> (1.5) <sup>2</sup> (0.95) <sup>3</sup>	5.6 (0.9) (0.89)	4.8 (1.3) (0.93)
Social normative influence (SNI)	3.5 (1.8) (0.91)	5.0 (1.2) (0.80)	4.6 (1.2) (0.80)
Materialism (MAT)	4.4 (1.5) (0.82)	5.2 (1.1) (0.79)	4.7 (1.1) (0.76)
Identification with brand websites as communities (IDEN)	3.8 (1.3) (0.92)	4.7 (0.8) (0.85)	4.0 (1.0) (0.89)
Consumer interactions on brand websites (CIBW)	4.7 (1.6) (0.93)	5.4 (1.1) (0.90)	4.6 (1.2) (0.88)

<sup>1</sup>Means <sup>2</sup>Standard deviations <sup>3</sup>Cronbach's alpha reliabilities.

**Table 2**  
CFA measurement model factor item loadings.

	USA	China	South Korea
BESC			
BESC_2	0.92	0.78	0.88
BESC_3	0.90	0.77	0.85
BESC_6	0.90	0.81	0.84
BESC_7	0.87	0.80	0.84
BESC_8	0.89	0.81	0.88
IDEN			
IDEN_2	0.86	0.75	0.80
IDEN_3	0.87	0.79	0.79
IDEN_4	0.89	0.71	0.83
IDEN_5	0.86	0.84	0.85
IDEN_2	0.86	0.75	0.80
CIBW			
CIBW_1	0.82	0.80	0.79
CIBW_2	0.90	0.80	0.79
CIBW_3	0.88	0.85	0.80
CIBW_4	0.91	0.90	0.84
MAT			
MAT_1	0.77	0.70	0.72
MAT_5	0.74	0.69	0.65
MAT_6	0.83	0.86	0.81
SNI			
SNI_2	0.87	0.75	0.81
SNI_4	0.89	0.76	0.77
SNI_8	0.89	0.77	0.72

constructs should be reversed. For this reason, a second competing model with the path reversed was specified, but fit did not significantly improve and resulted in substantially lower path coefficients. Overall, these results strongly support the more parsimonious model.

## 5. Findings

### 5.1. Hypothesis testing

As noted, fit for the hypothesized structural model was very strong, enabling analysis of hypothesized paths. Starting with the exogenous social self-schema antecedents, H1 predicted higher levels of SNI would be associated with higher levels of BESC. H2 stated SNI would also be positively associated with the extent to which consumers in all

**Table 3**  
CFA measurement model reliabilities, AVEs, squared correlations.

	( $\alpha$ ) <sup>1</sup>	BESC	IDEN	CIBW	MAT	SNI
USA						
BESC	0.95	0.80 <sup>2</sup>	0.30 <sup>3</sup>	0.13	0.24	0.35
IDEN	0.93		0.76	0.53	0.16	0.32
CIBW	0.93			0.77	0.09	0.15
MAT	0.82				0.61	0.33
SNI	0.91					0.78
China						
BESC	0.90	0.63 <sup>2</sup>	0.56 <sup>3</sup>	0.44	0.28	0.28
IDEN	0.85		0.59	0.59	0.27	0.34
CIBW	0.91			0.71	0.31	0.27
MAT	0.80				0.57	0.29
SNI	0.80					0.58
South Korea						
BESC	0.93	0.74 <sup>2</sup>	0.52 <sup>3</sup>	0.39	0.33	0.46
IDEN	0.89		0.67	0.45	0.26	0.39
CIBW	0.88			0.65	0.17	0.23
MAT	0.77				0.53	0.28
SNI	0.81					0.59

<sup>1</sup> Reliabilities.

<sup>2</sup> AVE's.

<sup>3</sup> Squared correlations.

three countries identified with brand websites as communities. Both hypotheses were supported in all three countries (see Table 4 and Fig. 2). Also, the relationship between materialism and BESC (H3) was positive. H4 was only supported in South Korea, where a significant direct effect was found between BESC and CIBW. Mediation analysis revealed indirect-only mediation effects (Zhao, Lynch & Chen, 2010) from BESC to CIBW through community identification in the U.S. and China. Complementary mediation effects were found in South Korea. Thus, although a direct effect of BESC on CIBW was not identified in China or the U.S., very robust indirect mediation effects (H5) through community identification were found in all three countries.

Critical ratio (CR) analysis using AMOS (Byrnes, 2001) was applied to examine the cross-cultural moderation hypotheses (H6a–H6c). Using multi-group SEM, as predicted, the CR's for H6a and H6c did not exceed 1.96. ( $p \leq .05$ ). This was also the case for H6b, the path from SNI to identification brand websites as communities, the path that was expected to be moderated by culture. Thus, H6b was not supported. However, the paths, SNI to BESC and BESC to CIBW were stronger in South Korea than in the U.S. ( $CR = 2.13, p < .05$ ;  $CR = 2.97, p < .05$ , respectively). Coupled with the direct path from BESC to CIBW, which was only significant in South Korea, these positive moderation results suggest identification with brands may exert stronger and more pervasive influences in that country than in the U.S. Nonetheless, given 6 hypothesized paths and 3 countries, the fact that only two paths significantly differed indicates that proposed relationships within the nomological net were robust across the three diverse national markets.

## 6. Discussion

Given the continued growth and spread of global brands (Talay, Townsend & Yeniurt, 2015), it is important to develop models that predict consumer interaction levels on brand websites (CIBW) not only in the U.S., but also in other national markets such as China and South Korea. Thus, an important contribution of this paper involves use of self-knowledge theory (Markus, 1983) as an overall guide to frame investigation of similarities and differences in nomological networks of self-schema antecedents and mediators across three diverse national markets. Extending Pentina et al. (2013a), this study found that BESC's influence on CIBW was mediated in all countries by how strongly consumers achieved a sense of community through brand websites (H5). Consumers who more deeply incorporate brands within their self-concepts (high BESC), whether in East Asia or the U.S., also experienced stronger feelings of community through brand websites and higher levels of CIBW. Only in South Korea was the direct path from BESC to CIBW significant. This result was unexpected given H4. A post hoc explanation would be premature at this point and must await further study. However, in all three countries, the indirect path through brand community identification to CIBW was clearly the more important predictor. This is a meaningful finding, as it points to the potential value of proactively building a sense of community on brand websites in Western and East Asian national markets when strategic objectives include increasing levels of CIBW.

Also important is the finding in all countries that higher levels of BESC were driven, in part, by higher SNI (H1) and stronger materialist values (H3). As such, companies appear likely to benefit from targeting younger middle age consumers in the U.S., China, and South Korea using brand promotion tactics emphasizing social status enhancement motivations on search engines and social media. Such communications could be designed to emphasize connections between brands and consumers' social goals related to peer recognition. Consumers with higher SNI are likely to find such messages more attractive, particularly if they have stronger materialist values. Granted, this approach may not reach or appeal to broader segments of consumers, but targeting online interactive Gen X and Millennial consumers in the three countries with search engine and social media communications could motivate many to visit and become active on brand websites of interest. Given the

**Table 4**  
Structural equation model unstandardized path coefficients.

	Direct effects			Indirect effects – (confidence intervals and mediation type)			Hypotheses
	U.S.	China	South Korea	U.S.	China	South Korea	
SNI → BESC	0.43***	0.27**	0.74***				H1 Support
SNI → IDEN	0.28***	0.18***	0.23**				H2 Support
MAT → BESC	0.25**	0.26***	0.26**				H3 Support
BESC → CIBW	–0.10	–0.01	0.23*	No direct effect	No direct effect	Direct effect	H4 Partial Support
BESC → IDEN → CIBW	0.24***	0.59***	0.39***	0.109 ~ 0.424 indirect-only mediation	0.279 ~ 1.425 indirect-only mediation	0.131 ~ 0.577 complementary mediation	H5 Support

\* p ≤ .05.  
\*\* p ≤ 0.01.  
\*\*\* p ≤ 0.001.

upstream influence of SNI and materialism on CIBW, such tactics may be particularly helpful for luxury brands associated with high public display brands such as clothing, cars, and jewelry.

This study also suggests several ways Internet marketing managers can enhance CIBW. As noted, the central role of BESC points to the importance of targeting consumers who more frequently and deeply incorporate brands within their self-concepts in order to increase CIBW. Because many consumers purchase products they perceive as self-representative (e.g., Escalas & Bettman, 2005), those with higher BESC appear particularly valuable as prospects for building online relationships. Such consumers are also likely to identify more strongly with brand websites as communities and, as a result, to interact online with firms and each other at the highest levels. In addition, firms may benefit from proactively educating managers about the potential value of information generated by fostering CIBW. For example, global firms may gain advantages by learning about ways their brands are *creolized* by local consumers, that is, infused with localized meanings and uses (Eckhardt & Mahi, 2004). This recommendation appears particularly relevant for companies marketing more cultural products such as foods and beverages (Hirschman, 1986).

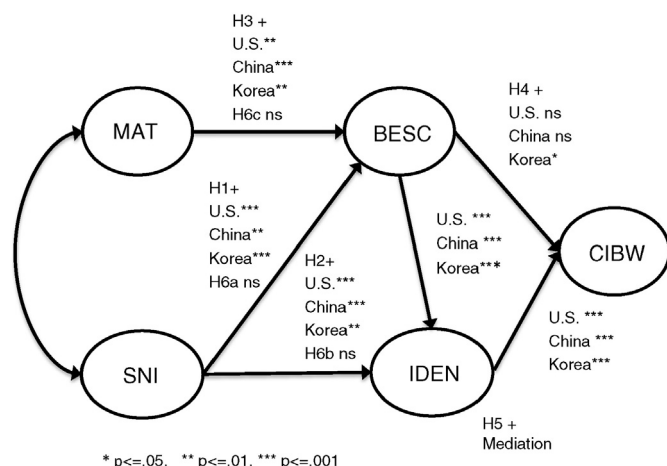
**7. Limitations and future research**

As with all research efforts, this study has limitations. One limitation is the focus on three national markets. Generalizability to countries beyond the three should be investigated. In addition, the study employed quota-based convenience samples of younger adults. However, given

our emphasis on building a theory-based nomological net that predicts CIBW, random sample selection is less critical than comparability across countries. Furthermore, this research focused deliberately on consumers who self-identified as somewhat to highly interactive on brand websites. Because younger Gen X and Millennial consumers in particular spend relatively more of their time interacting online (Emarketer.com, 2013) and because more interactive consumers are likely to be “leaders” (Andersen, 2005) and “contributors” (Preece & Shneiderman, 2009), improving managers’ understanding of factors leading to higher CIBW for these groups is an important and necessary step. However, future research should examine the extents to which the model predicts well for broader segments of consumers. It is also important to remember that the study was cross-sectional. Experimental studies that manipulate antecedents in the model would further establish validity of the specified model.

Longitudinal studies could also help determine how CIBW changes over time. Another valuable direction for future research involves investigation of other antecedents to CIBW at the individual difference level. Measuring self-construal (Cross, Hardin & Gercek-Swing, 2011), uncertainty avoidance (Sharma, 2010), opinion leadership/following tendencies (Dawar, Parker & Price, 1996), and time orientation (Voss & Blackmon, 1998) may reveal interesting variations in influences on CIBW within and across cultures. Such research has implications for focusing on brand website strategies that will benefit from cross-national adaptation, as opposed to standardization. Prior research has emphasized personal motives that drive brand community participation (e.g., Dholakia et al., 2004). In a cross-cultural context, individual motivations may correlate with cultural learning and provide insight into drivers of CIBW. For example, do consumers from Eastern and Western cultures differ in terms of motivation to seek versus give information on brand websites? One article estimates that only 10% of brand website users self-identify as active or moderately active online (Emergency Marketing, 2010). Future research should investigate approaches to motivating other consumers to interact in ways that facilitate use of co-creation as a managerial tool.

Finally, it is important to note that increasing CIBW can lead to negative as well as positive information being posted on brand websites (Wu, Hu & Wu, 2010). Recent research suggests that the level and type of CIBW should be considered in formulating managerial responses (Homburg et al., 2015). In some cases, it appears high levels of managerial engagement with highly interactive consumer-to-consumer conversations may engender negative, as opposed to positive, sentiments. In other cases, high levels of managerial interactivity with consumers may be warranted. Thus, in addition to continuing to better understand the drivers of CIBW, researchers should consider different types of interactions and managerial responses with an eye toward developing contingency models (Zeithaml, Varadarajan & Zeithaml, 1988) that optimize the quality of the brand experiences for both consumers and firms.



**Fig. 2.** Multi-group SEM analysis of model predicting CIBW.

## Appendix A. Latent factor constructs and scale items used in analyses

Brand Engagement in Self-Concept (BESC: Sprott et al., 2009)  $\alpha_{USA} = 0.97 (0.95)^1$ ;  $\alpha_{KOREA} = 0.96 (0.93)$ ;  $\alpha_{CHINA} = 0.92 (0.89)$ .

1. I consider my favorite brands to be a part of my self.
2. I often feel a personal connection between my brands and me.
3. I can identify with important brands in my life.
4. There are links between the brands that I prefer and how I view myself.
5. My favorite brands are an important indication of who I am.

Consumer Interactions on Brand Websites (CIBW: based on Wu and Fang, 2010)  $\alpha_{USA} = 0.93$ ;  $\alpha_{KOREA} = 0.88$ ;  $\alpha_{CHINA} = 0.90$ .

1. I communicate online with the company and/or other brand users via Twitter, Facebook, etc.
2. I spend time on brand websites interacting with other consumers about the brand or other topics.
3. I participate in online discussions with the company and/or other brand users on one or more websites.
4. I offer my thoughts about the brand online via one or more brand websites to the company and/or other brand users.

Identification with Brand Websites as Communities (IDEN: based on Algesheimer et al., 2005)  $\alpha_{USA} = 0.94 (0.92)$ ;  $\alpha_{KOREA} = 0.91 (0.89)$ ;  $\alpha_{CHINA} = 0.87 (0.85)$ .

1. Other online brand community members and I share the same objectives.
2. The friendships I have with other online brand community members mean a lot to me.
3. If online brand community members planned something, I'd think of it as something "we" would do rather than something "they" would do.
4. I see myself as a part of one or more online brand communities.

Materialism (MAT: Richins, 2004)  $\alpha_{USA} = 0.87 (0.82)$ ;  $\alpha_{KOREA} = 0.87 (0.76)$ ;  $\alpha_{CHINA} = 0.82 (0.79)$ .

1. I admire people who own expensive homes, cars, and clothes.
2. Buying things gives me a lot of pleasure.
3. I like a lot of luxury in my life.

Social normative influence (SNI: Bearden et al., 1989)  $\alpha_{USA} = 0.96 (0.91)$ ;  $\alpha_{KOREA} = 0.90 (0.81)$ ;  $\alpha_{CHINA} = 0.88 (0.80)$ .

1. It is important that others like the products and brands I buy.
2. If other people can see me using a product, I often purchase the brand they expect me to buy.
3. I often identify with other people by purchasing the same products and brands they purchase.

## References

- Alden, D. L., Steenkamp, J. B. E., & Batra, R. (2006). Consumer attitudes toward marketplace globalization: Structure, antecedents and consequences. *International Journal of Research in Marketing*, 23(3), 227–239.
- Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, 69(3), 19–34.
- Andersen, P. H. (2005). Relationship marketing and brand involvement of professionals through web-enhanced brand communities: The case of Coloplast. *Industrial Marketing Management*, 34(1), 39–51.
- Asmussen, B., Harridge-March, S., Occhicupo, N., & Farquhar, J. (2013). The multi-layered nature of the Internet-based democratization of brand management. *Journal of Business Research*, 66(9), 1473–1483.
- Bagozzi, R. P., & Dholakia, U. M. (2002). Intentional social action in virtual communities. *Journal of Interactive Marketing*, 16(2), 2–21.
- Bagozzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23(1), 45–61.

- Batra, R., Homer, P. M., & Kahle, L. R. (2001). Values, susceptibility to normative influence, and attribute importance weights: A nomological analysis. *Journal of Consumer Psychology*, 11(2), 115–128.
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15(4), 473–481.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39(4), 555–577.
- Bhattacharya, C. B., & Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing*, 67(2), 76–88.
- Bolton, R., & Saxena-Iyer, S. (2009). Interactive services: A framework synthesis and research directions. *Journal of Interactive Marketing*, 23(1), 91–104.
- Browne, B. A., & Kaldenberg, D. O. (1997). Conceptualizing self-monitoring: Links to materialism and product involvement. *Journal of Consumer Marketing*, 14(1), 31–44.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Carlson, B. D., Suter, T. A., & Brown, T. J. (2008). Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research*, 61(4), 284–291.
- Chang, A., Hsieh, S. H., & Lin, F. (2013). Personality traits that lead members of online brand communities to participate in information sending and receiving. *International Journal of Electronic Commerce*, 17(3), 37–62.
- Chatterjee, S., Roy, R., & Malshe, A. V. (2011). The role of regulatory fit on the attraction effect. *Journal of Consumer Psychology*, 21(4), 473–481.
- Cleveland, M., Laroche, M., & Papadopoulos, N. (2009). Cosmopolitanism, consumer ethnocentrism, and materialism: An eight-country study of antecedents and outcomes. *Journal of International Marketing*, 17(1), 116–146.
- Cross, S. E., Hardin, E. E., & Gercek-Swing, B. (2011). The what, how, and why of self-construal. *Personality and Social Psychology Review*, 15(2), 142–179.
- Dawar, N., Parker, P. M., & Price, L. J. (1996). A cross-cultural study of interpersonal information exchange. *Journal of International Business Studies*, 27(3), 497–516.
- Deighton, J., & Kornfeld, L. (2009). Interactivity's unanticipated consequences for marketers and marketing. *Journal of Interactive Marketing*, 23(1), 4–10.
- Dellarocas, C., Zhang, X., & Awad, N. F. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing*, 21(4), 23–45.
- De Vries, L., Gensler, S., & Leeflang, P. S. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing*, 26(2), 83–91.
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International Journal of Research in Marketing*, 21(3), 241–263.
- Eckhardt, G. M., & Mahi, H. (2004). The role of consumer agency in the globalization process in emerging markets. *Journal of Macromarketing*, 24(2), 136–146.
- Emarketer.com (2013). How digital behavior differs among Millennials, Gen Xers and Boomers. (Available at) <http://www.emarketer.com/Article/How-Digital-Behavior-Differs-Among-Millennials-Gen-Xers-Boomers/1009748>. (Accessed 9 November 2015).
- Emergency Marketing (2010). Active lurkers – The hidden asset in online communities. (Available at) <http://www.emergencemarketing.com/2010/02/18/active-lurkers-the-hidden-asset-in-online-communities> (Accessed 21 April 2014)
- Engelen, A., & Brettel, M. (2011). Assessing cross-cultural marketing theory and research. *Journal of Business Research*, 64(5), 516–523.
- Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(3), 378–389.
- Forehand, M. R., Deshpande, R., & Reed, A. (2002). Identity salience and the influence of differential activation of the social self-schema on advertising response. *Journal of Applied Psychology*, 87(6), 1086–1099.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343–353.
- Hair, J. F., Black, B., Babin, B., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15–30.
- Hirschman, E. C. (1986). The creation of product symbolism. *Advances in Consumer Research*, 13(1), 327–331.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Homburg, C., Ehm, L., & Artz, M. (2015). Measuring and managing consumer sentiment in an online community environment. *Journal of Marketing Research*, 52(5), 629–641.
- Huffaker, D. (2010). Dimensions of leadership and social influence in online communities. *Human Communication Research*, 36(4), 593–617.
- Jayanti, R. K., & Singh, J. (2010). Pragmatic learning theory: An inquiry-action framework for distributed consumer learning in online communities. *Journal of Consumer Research*, 36(6), 1058–1081.
- Kelley, J.B. Alden, D.L. (2016). Online brand community: Through the eyes of self-determination theory. *Internet Research* (forthcoming).
- Kozinets, R. V., De Valk, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of Marketing*, 74(2), 71–89.
- Kucuk, S. U., & Krishnamurthy, S. (2007). An analysis of consumer power on the Internet. *Technovation*, 27(1), 47–56.

<sup>1</sup> Full (reduced) scale Cronbach's alphas.

- Madupu, V., & Cooley, D. O. (2010). Antecedents and consequences of online brand community participation: A conceptual framework. *Journal of Internet Communication*, 9(2), 127–147.
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357–365.
- Markus, H. (1983). Self-knowledge: An expanded view. *Journal of Personality*, 51(3), 543–565.
- Molesworth, M., & Denegri-Knott, J. (2007). Digital play and the actualization of the consumer imagination. *Games and Culture*, 2(2), 114–133.
- Novak, T. P., Hoffman, D. L., & Yung, Y.-F. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), 22–42.
- Pentina, I., Gammoh, B. S., Zhang, L., & Mallin, M. (2013a). Drivers and outcomes of brand relationship quality in the context of online social networks. *International Journal of Electronic Commerce*, 17(3), 63–86.
- Pentina, I., Zhang, L., & Basmanova, O. (2013b). Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter. *Computers in Human Behavior*, 29(4), 1546–1555.
- Podoshen, J. S., & Andrzejewski, S. A. (2012). An examination of the relationships between materialism, conspicuous consumption, impulse buying, and brand loyalty. *The Journal of Marketing Theory and Practice*, 20(3), 319–334.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Porter, C. E., Donthu, N., MacElroy, W. H., & Wydra, D. (2011). How to foster and sustain engagement in virtual communities. *California Management Review*, 53(4), 80–110.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14.
- Preece, J., & Shneiderman, B. (2009). The reader-to-leader framework: Motivating technology-mediated social participation. *AIS Transactions on Human-Computer Interaction*, 1, 13–32.
- Puligadda, S., Ross, W. T., Jr., & Grewal, R. (2012). Individual differences in brand schematcity. *Journal of Marketing Research*, 49(1), 115–130.
- Ren, Y., Harper, F. M., Drenner, S., Terveen, L. G., Kiesler, S. B., Riedl, J., & Kraut, R. E. (2012). Building member attachment in online communities: Applying theories of group identity and interpersonal bonds. *MIS Quarterly*, 36(3), 841–864.
- Richins, M. L. (1987). Media, materialism, and human happiness. *Advances in Consumer Research*, 14(1), 352–356.
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1), 209–219.
- Richins, M. L. (2013). When wanting is better than having: materialism, transformation, expectations, and product-evoked emotions in the purchase process. *Journal of Consumer Research*, 40(1), 1–18.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303–316.
- Riemer, H., Shavitt, S., Koo, M., & Markus, H. R. (2014). Preferences don't have to be personal: Expanding attitude theorizing with a cross-cultural perspective. *Psychological Review*, 121(4), 619–648.
- Rindfleisch, A., Burroughs, J. E., & Wong, N. (2009). The safety of objects: Materialism, existential insecurity, and brand connection. *Journal of Consumer Research*, 36(1), 1–16.
- Robinson, W. S. (1950). Ecological correlations and the behavior of individuals. *American Sociological Review*, 15(3), 351–357.
- Sharma, P. (2010). Measuring personal cultural orientations: Scale development and validation. *Journal of the Academy of Marketing Science*, 38(6), 787–806.
- Simmons, G. (2008). Marketing to postmodern consumers: Introducing the Internet chameleon. *European Journal of Marketing*, 42(3/4), 299–310.
- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, 46(1), 92–104.
- Statista (2014). Statistics and market data on online demographics and use. (Available at) <http://www.statista.com/markets/424/topic/537/demographics-use/> (Accessed 29 October 2015)
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25(1), 78–107.
- Steenkamp, J. B. E., & de Jong, M. G. (2010). A global investigation into the constellation of consumer attitudes toward global and local products. *Journal of Marketing*, 74(6), 18–40.
- Stokburger-Sauer, N., Ratneshwar, S., & Sen, S. (2012). Drivers of consumer-brand identification. *International Journal of Research in Marketing*, 29(4), 406–418.
- Talay, M. B., Townsend, J. D., & Yenyurt, S. (2015). Global brand architecture position and market-based performance: The moderating role of culture. *Journal of International Marketing*, 23(2), 55–72.
- Teichmann, K., Stokburger-Sauer, N. E., Plank, A., & Strobl, A. (2015). Motivational drivers of content contribution to company-versus consumer-hosted online communities. *Psychology & Marketing*, 32(3), 341–355.
- Triandis, H. C., McCusker, C., & Hui, H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology*, 59(5), 1006–1020.
- Tsai, H. T., & Bagozzi, R. P. (2014). Contribution behavior in virtual communities: Cognitive, emotional, and social influences. *MIS Quarterly*, 38(1), 143–163.
- Tuškej, U., Golob, U., & Podnar, K. (2013). The role of consumer – Brand identification in building brand relationships. *Journal of Business Research*, 66(1), 53–59.
- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253–266.
- Voss, C., & Blackmon, K. (1998). Differences in manufacturing strategy decisions between Japanese and western manufacturing plants: The role of strategic time orientation. *Journal of Operations Management*, 16(2), 147–158.
- Wallace, E., Buil, I., de Chernatony, L., & Hogan, M. (2014). Who likes you and why? A typology of Facebook fans. *Journal of Advertising Research*, 16(1), 1–26.
- Wheeler, S. C., Petty, R. E., & Bizer, G. Y. (2005). Self-schema matching and attitude change: Situational and dispositional determinants of message elaboration. *Journal of Consumer Research*, 31(4), 787–797.
- Workman, J. E., & Lee, S. H. (2011). Materialism, fashion consumers and gender: A cross-cultural study. *International Journal of Consumer Studies*, 35(1), 50–57.
- Wu, G., Hu, X., & Wu, Y. (2010). Effects of perceived interactivity, perceived web assurance and disposition to trust on initial online trust. *Journal of Computer-Mediated Communication*.
- Wu, J., Huang, L., Zhao, J. L., & Hua, Z. (2015). The deeper, the better? Effect of online brand community activity on customer purchase frequency. *Information & Management*, 52, 813–823.
- Wu, S. C., & Fang, W. (2010). The effect of consumer-to-consumer interactions on idea generation in virtual brand community relationships. *Technovation*, 30(11), 570–581.
- Yim, M. Y.-C., Sauer, P. L., Williams, J., Lee, S.-J., & Macrury, I. (2014). Drivers of attitudes toward luxury brands: A cross-national investigation into the roles of interpersonal influence and brand consciousness. *International Marketing Review*, 31(4), 363–389.
- Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research*, 66(2), 216–223.
- Zeithaml, V. A., Varadarajan, P. R., & Zeithaml, C. P. (1988). The contingency approach: Its foundations and relevance to theory building and research in marketing. *European Journal of Marketing*, 22(7), 37–64.
- Zhang, Y., & Khare, A. (2009). The impact of accessible identities on the evaluation of global versus local products. *Journal of Consumer Research*, 36(3), 524–537.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.