ELSEVIER

Contents lists available at ScienceDirect

Journal of Business Research



How do brand communities generate brand relationships? Intermediate mechanisms ☆

Zhimin Zhou ^a, Qiyuan Zhang ^b, Chenting Su ^c, Nan Zhou ^{c,d,*}

- ^a Department of Marketing, Shenzhen University, 3688 Nanhai Avenue, Shenzhen, Guangdong, PR China
- ^b Department of Strategy and International Business, University of Hong Kong, Pokfulam, Hong Kong
- ^c Department of Marketing, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong
- ^d Department of Marketing, Wuhan University, PR China

ARTICLE INFO

Article history:
Received 1 March 2011
Received in revised form 1 June 2011
Accepted 1 June 2011
Available online 7 July 2011

Keywords:
Brand community
Brand attachment
Community-brand similarity
Brand relationship
Intermediate mechanism

ABSTRACT

This research investigates the intermediate mechanism that translates brand communities into brand relationships. Using a sample of online brand communities from China, the study finds that consumer brand attachment plays a full mediating role between brand community commitment and brand commitment and exerts partial mediation between brand identification and brand commitment. Perceived community-brand similarity moderates both brand community identification's effect on brand identification and brand community commitment's effect on brand attachment. The findings contribute to the brand literature and provide implications for brand community management.

© 2011 Elsevier Inc. All rights reserved.

1. Introduction

The past decade bears witness to a growing interest in brand community, a term different from other branding concepts on a single brand consumer (e.g., brand attitude, brand personality, and brand image) (see Algesheimer, Dholakia, & Herrmann, 2005; Schau, Muniz, & Arnould, 2009; Schouten, McAlexander, & Koenig, 2007; Stokburger-Sauer, 2010). Brand community refers to "a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand" (Muniz & O'Guinn, 2001, p. 412). Traditional literature on brand communication pays attention to the company-to-consumers paradigm, while a brand community describes a new paradigm of consumers-to-consumers communication (McAlexander, Schouten, & Koenig, 2002). Thus, "community" may replace "relationship" as a new marketing buzzword (McWilliam, 2000).

Prior research examines brand communities' effects on marketing performance (e.g., Fournier & Lee, 2009). Specifically, brand community identification, participation, and commitment all empirically lead to brand loyalty and recommendation (e.g., word of mouth). Although little

E-mail addresses: mnizzm@szu.edu.cn (Z. Zhou), bessieqy@hku.hk (Q. Zhang), mkctsu@cityu.edu.hk (C. Su), mkzhou@cityu.edu.hk (N. Zhou).

doubt exists about a brand community's strong impact on branding, the impact's mediation on brand relationships remains unclear. For example, a direct relationship exists between brand community commitment and brand commitment or loyalty (e.g., Jang, Olfman, Ko, Koh, & Kim, 2008). However, given that brand communities and consumer–brand relationships operate at different levels (McAlexander et al., 2002), the mechanisms mediating or moderating brand community effects on the consumer–brand relationship remain uncharted. Specifically, scholars and practitioners should understand how consumers' relationships with a brand community translate into their relationships with the brand, such as their commitment to the brand (e.g., Ahluwalia, Burnkrant, & Unnava, 2000). This study intends to uncover such intermediate mechanisms to enrich the understanding of brand community.

The reminder of the paper proceeds as follows: the next section presents the conceptual model built on relevant literature that sheds light on the research hypotheses. After the research methods, the paper presents the main research results based on an empirical study using data collected from a Chinese car club. Finally, the paper concludes with managerial implications as well as limitations and further research directions.

2. Conceptual model and hypotheses

2.1. Conceptual model

Consumers in a brand community identify and commit to the community as well as affect toward the brand due to shared brand

The authors acknowledge the financial support from National Natural Science Foundation of China (Grant Nos. 70802042 and 71002081) and Hong Kong Research Grants Council (Grant No. 9041466—CityU 150709). The authors also thank Dr. Julie Li and Dr. Wenyu Dou of City University of Hong Kong for their helpful comments to an earlier draft.

^{*} Corresponding author at: Department of Marketing, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong,

experiences (Scarpi, 2010). In addition, a match between the community traits (e.g., community members' demographics and psychographics) and the brand traits (e.g., brand personality) further influences the consumer–brand relationship (Milas & Mlačić, 2007). Therefore, consumer brand-related affect mediates the effects of consumer community-related brand cognition and conation; perceived similarity between the community and the brand plays a moderating role. Fig. 1 presents the conceptual model.

2.2. Research hypotheses

2.2.1. Basic relationships between brand community and the brand

Brand community identification stems from group identification, a specific social identification form in which people define themselves by their group membership (Mael & Ashforth, 1992). Shared values and experiences are the basis for brand community identification (Carlson, Suter, & Brown, 2008). Brand community membership produces an ideal social imagery and nurtures feelings of belongingness (Schau & Muniz, 2002). Brand community identification results in commitment to the brand community, a psychological bond describing a member's relationship with the group (Meyer & Allen, 1991).

Previous studies find that functional and social values lead to community commitment (Mathwick, Wiertz, & de Ruyter, 2008). Brand community identification brings forth such social values because the affiliation is based on the shared brand experiences and utility of community members. Identifying with a brand community means that the community members likely would buy the same brand, share their brand experiences, and draw similar functional utility from consuming the brand.

Group members with the shared brand experience and values more likely commit to the brand community to maintain a long-term relationship.

H1. Brand community identification influences brand community commitment positively.

According to organization science, a strong link exists between identification and commitment (e.g., Wan-Huggins, Riordan, & Griffeth, 1998). Company loyalty is a key consequence of consumer-company identification (Bhattacharya & Sen, 2003). Similarly, consumers' brand identification should lead them to commit to the brand. A long-term brand relationship likely develops when consumers believe the brand reflects their personalities and enhances their self-esteem and social status (Wang, 2002). When consumers

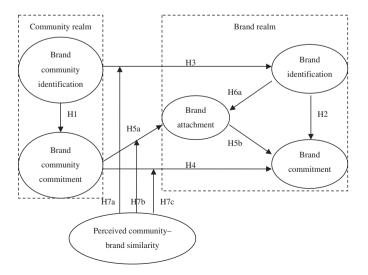


Fig. 1. The conceptual model*. *The model does not show the hypotheses of the mediating effects (H_{5c} and H_{6b}).

form strong brand identification, self-identification and satisfaction with the brand promotes their commitment to the brand (Park, MacInnis, & Priester, 2007).

H2. Brand identification influences brand commitment positively.

Two competing propositions exist on the relationship between brand community identification and brand identification. One study supports the positive influence of brand community identification on brand identification (Bagozzi & Dholakia, 2006), while another study supports the reverse relationship, that is, brand identification leads to brand community identification (Algesheimer et al., 2005). These findings imply a two-way relationship may exist between brand community identification and brand identification.

However, as a platform for consumers to share their brand experiences and values drawn from the brand, a brand community may reinforce consumers' brand cognition and attitude, thus enhancing their identification with the brand (Stokburger-Sauer, 2010). For example, Harley Owners Group (H.O.G.) consists of many passionate fans, who regularly gather to share their Harley-Davidson brand experiences. Such intimate community relationships lead to strengthened brand identification (Escalas & Bettman, 2003).

H3. Brand community identification influences brand identification positively.

Much research finds that members' commitment to a brand community leads to their commitment to the brand (e.g., Kim, Choi, Qualls, & Han, 2008). Consumers committing to a brand community tend to purchase the same brand consistently (Algesheimer et al., 2005). Purchasing a competing brand likely leads to cognitive dissonance and mitigates their relationships with other members (Scarpi, 2010). The committed participation and interactions with other members help strengthen consumers' brand experience and value, leading to their enhanced brand commitment or loyalty (Jang et al., 2008).

H4. Brand community commitment influences brand commitment positively.

2.2.2. The mediating effects of brand attachment

Bowlby's (1979) seminal research defines attachment as an emotion-laden, target-specific bond between a person and a specific object, typically a caregiver. Attachment occurs and develops when people get closer to share emotions (Thomson, MacInnis, & Park, 2005). The marketing researchers introduce the concept of attachment into branding research (Schouten & McAlexander, 1995). Park, MacInnis, Priester, Eisingerich, and Iacobucci (2010, p. 2) define brand attachment as "the strength of the bond connecting the brand with the self."

In a long-term relationship with a brand community, consumers continuously interact with other members and draw values and utilities from consuming the same brand. This sharing over time derives more brand value, developing closer consumer relationship within the community and brand love (Carroll & Ahuvia, 2006).

The brand enables the consumers to realize more of their consumption objectives. Consumers committed to the brand community understand and sense the brand deeply and continuously, forming a strong brand attachment (Park et al., 2007; Park et al., 2010).

H5a. Brand community commitment influences brand attachment positively.

In psychology literature, people showing attachment to others tend to be loyal to their partners, resist competing alternatives, and make sacrifices to support the relationship (Thomson et al., 2005). In marketing literature, attachment strongly impacts sustained, crosstime consumer brand behaviors and exchanges (Thomson et al., 2005). Gratified, enriched, and enabled by consuming a strong brand,

consumers tend to create and engage in a long-term brand relationship, including stronger forms of brand equity-relevant behaviors (Ahluwalia et al., 2000).

H5b. Brand attachment influences brand commitment positively.

Combining H_{5a} with H_{5b} implies brand attachment plays a positive mediating role between brand community commitment and brand commitment. Consumers' long-term relationship with the brand community more likely appreciate the brand meanings and values by consuming the brand and sharing brand experience, thus forming a bond with the brand (i.e., brand attachment). As H_{5b} hypothesizes, such brand-related emotion (brand attachment) translates into brand-related conation (brand commitment).

H5c. Brand attachment mediates brand community commitment's positive influence on brand commitment.

Brand attachment as a bond connects the brand to the individual (Park et al., 2010). Psychology research shows this strong attachment comes from a rich set of schemas and affectively laden memories linking the object to the self (Mikulincer, Hirschberger, Nachmias, & Gillath, 2001). In branding, this connectedness makes the brand link to consumers' self-imagery. When the brand gratifies, enriches, and enables the consumer's self, brand attachment develops (Park et al., 2007; Park et al., 2010). The stronger the links between the brand and the consumer, the more self-expression experiences the brand provides for the consumer (Kleine & Baker, 2004) and, thus, the more the consumer show attachment to the brand.

H6a. Brand identification influences brand attachment positively.

Combining H_{5b} and H_{6a} suggests brand attachment also plays a positive mediating role between brand identification and brand commitment. Specifically, consumers identified with a brand form self-imagery based on brand image. They express themselves through brand personality. This symbolic utility or social value develops into a consumer emotional bond with the brand (Park et al., 2007). To a certain extent, a strong attachment makes the object irreplaceable (Thomson et al., 2005). The stronger the consumers' emotional bond with the brand, the longer are their brand relationships (Carroll & Ahuvia, 2006). Thus, brand attachment (emotion) connects brand identification (cognition) with brand commitment (conation).

H6b. Brand attachment mediates brand identification's positive influence on brand commitment.

2.2.3. The moderating effects of perceived community-brand similarity H₃, H₄, and H_{5a} posit consumers' brand identification and commitment to community positively influence their identification with, commitment, and attachment to the brand, respectively. However, if the brand community's human characteristics and the lifestyles do not match the brand image, the effects in H₃, H₄, and H_{5a} likely do not occur.

Prior research pinpoints the importance of matching a consumer's personality (the so-called self of the consumer) with the brand personality (the so-called self-congruence) (e.g., Aaker, 1997). Consumers

highly identifying with and/or committing to the brand community may share some values and interests to participate in certain joint community activities. For example, the members in My Jeep Community attend outdoors activities, such as camping and climbing. These shared activities match with members' similar demographic or psychographic factors. If the congruence between such shared community characteristics and brand characteristics (e.g., brand personality) is weak, consumers in the brand community may not identify themselves with or be attached or committed to the brand (Aaker, 1997).

H7a. The community–brand similarity moderates the relationship between brand community identification and brand identification positively.

H7b. The community–brand similarity moderates the relationship between brand community commitment and brand attachment positively.

H7c. The community–brand similarity moderates the relationship between brand community commitment and brand commitment positively.

3. Method

3.1. Sample

The research tested the model using data collected from a Chinese car club. Marketing researchers find car clubs have high member participation and engagement (e.g., Algesheimer et al., 2005). In China, several car clubs exist around Chinese national car brands (e.g., Chery, BYD), providing useful empirical data sources for the current study. Using an online survey based on Sojump (www.sojump.com), the research collected data from a nation-wide online car community with 170,000 members, Xin Qi Jun (a club of Chery cars), on which more than 5000 members received the invitation by e-mail to participate in the study.

The data collection continued for two months, after which the records showed that 909 car club members with dedicated Internet protocols viewed the questionnaire online and 586 members submitted their responses. Of these, 149 respondents went below the time baseline (i.e., they viewed the online questionnaire less than 5 min) or did not meaningfully answer the questionnaire, resulting in 437 usable questionnaires for the final empirical test. Table 1 provides the demographic characteristics of the usable sample.

3.2. Measures

The research adapted measures from the literature for five of the six constructs employed in the conceptual model, which include brand community identification, brand community commitment, brand attachment, brand identification, and brand commitment. The research developed a scale for measuring the new construct "perceived community—brand similarity." All the measurement scales were six-point Likert scales because Chinese participants tend to hold the doctrine of the mean. They often select the neutral point in a five-or seven-point Likert scale.

Table 1 Demographic characteristics.

Gender	Age		Income (RMB)		Education		Tenure		
Male Female	97.3% 2.7%	21–30 31–40 41–50 >50	29.3% 54.5% 13.3% 2.9%	<3000 3001–5000 5001–8000 8001–15,000 >15,000	26.8% 37.1% 19.9% 11.9% 4.3%	High school or below Junior college Undergraduate Post-graduate or above	7.3% 22.9% 50.1% 19.7%	<1 year 1 year 2 years 3 years 4 years >5 years	18.8% 16.2% 20.4% 17.4% 13.5% 13.7%

Brand community identification refers to members' sense of being a part of the brand community. Six items adapted from the literature measure the construct (Algesheimer et al., 2005; Mael & Ashforth, 1992). Brand community commitment indicates members' desire to maintain their relationships with the brand community. A five-item measure adapted from prior research (Mathwick et al., 2008; Wasko & Faraj, 2005) taps consumers' long-term community relationships. Brand attachment refers to the bond connecting the brand with the self. This study uses a ten-item scale adapted from previous literature to measures this construct, including three first-order dimensions of affection, connection, and passion (Thomson et al., 2005). Measures of brand identification rely on a six-item scale (Kim, Han, & Park, 2001; Mael & Ashforth, 1992) to assess consumers' cognitive links with the brand for self-expression. Brand commitment refers to consumers' desire to maintain their relationships with the brand, adapting a three-item scale (Raju, Unnava, & Montgomery, 2009). A new measure for "perceived community-brand similarity", which indicates the similarity between brand community characteristics and brand traits, including members' personality, values, and styles, develops following Churchill's (1979) suggestions.

First, two items based on the literature related to similarity (Ensher & Muphy, 1997; Huang & Iun, 2006) and three items based on observations of several brand communities formed the scale. Twelve marketing professors then commented on these items, which helped revise the scale. After the first author translated the measures into a Chinese language version, a back translation helped ensure scale accuracy. Finally, an exploratory factor analysis, a reliability test, and a confirmatory factor analysis based on two groups of data served to safeguard the measure's quality.

3.3. The method of data analysis

A partial least square (PLS) model serves the purpose of hypothesis testing. PLS is a useful multivariate causal modeling vehicle for relationships between multiple dependent and independent latent constructs (Mathwick et al., 2008). This method instead of Linear Structural Relationships (LISREL) modeling or the multiple regression method (MRM) takes into account the following considerations: (1) PLS calculates all the coefficients of a model and incorporates moderator constructs more easily; (2) PLS takes into account the relationships among all variables at the same time, while MRM assumes constant effects of other variables when considering the focal variable; and (3) LISREL and MRM require multivariate normality, but PLS does not.

The current research model includes moderating effects and multiple dependent variables, which supports using PLS. Specifically, SmartPLS 2.0 tested the hypotheses (Ringle, Wende, & Will, 2005).

4. Results

4.1. Measurement model

Internal consistency data reliability relied on a confirmatory factor analysis and Cronbach's α level (see Table 2). The results indicate that all the thirty-three items possess significant, standardized factor loadings (r>.55). The test extracted eight factors as expected. Cronbach's alpha factors are all above .84, indicating high internal consistency (Nunnally, 1978). The eight construct's composite reliabilities all exceed .90, suggesting the measuring items have adequate reliability.

Confirmatory factor analysis also tested the convergent validity. Overall model fit indices ($\chi^2(499) = 1797.88$, p < .01; root mean square error of approximation [RMSEA] = .077; comparative fit index [CFI] = .91; non-normed fit index [NNFI] = .90; and incremental fit index [IFI] = .91) are satisfactory. Discriminant validity relies on average variance extracted (AVE). Table 3 shows all AVEs are above

.68, and the square root of each construct's AVE exceeds the coefficients between the measure and other constructs (Fornell & Larker, 1981). Overall, these results show that the study measurement items possess adequate reliability and validity.

4.2. The tests of hypotheses

Three models hierarchically test the mediation and moderation effects. Model 1, which includes only four variables (i.e., brand community identification, brand community commitment, brand identification, and brand commitment), tests the main effects. Model 2 adds brand attachment to test the mediation effects. Model 3 adds perceived community–brand similarity as the moderator. Table 4 shows the empirical results.

 Table 2

 Measurement items and validity assessment.

weasurement items and validity assessment.	
	SFL
Brand community identification (Cronbach's $\alpha = .90$)	
When I talk about Brand Community X, I usually say "we" rather	.76
than "they."	
I see myself as a part of Brand Community X.	.77
Brand Community X's successes are my successes.	.88
When someone praises Brand Community X, it feels like a	.91
personal compliment.	
When someone criticizes Brand Community X, it feels like a personal insult.	.82
I am very interested in what others think about Brand Community X.	.55
Brand community commitment (Cronbach's $\alpha = .93$)	
I would feel a loss if Brand Community X was no longer available.	.79
I really care about the fate of Brand Community X.	.85
I feel a great deal of loyalty to Brand Community X.	.89
The relationship I have with Brand Community X is one I intend to	.86
maintain indefinitely.	
The relationship I have with Brand Community X is important to me.	.85
Affection (Cronbach's $\alpha = .94$)	
Brand X is affectionate.	.83
Brand X is loved.	.84
Brand X is peaceful.	.95
Brand X is friendly.	.95
Connection (Cronbach's $\alpha = .91$)	
I am attached to Brand X.	.87
I am bonded by Brand X.	.90
I am connected with Brand X.	.87
Passion (Cronbach's $\alpha = .92$)	00
Brand X makes me passionate.	.90
Brand X makes me delighted.	.85
Brand X makes me captivated.	.94
Brand identification (Cronbach's α = .90)	7.0
Brand X's successes are my successes.	.76
I am interested in what others think about Brand X.	.59
When I talk about Brand X, I usually say "we" rather than "they." When someone praises Brand X, it feels like a personal compliment.	.77 .95
When someone criticizes Brand X, it feels like a personal insult.	.93
Brand commitment (Cronbach's $\alpha = .84$)	.93
If Brand X was not available, it would make little difference to me if I had	.75ª
to choose another brand.(R)	.73
I can see myself as being loyal to Brand X.	.90
I will more likely purchase a brand that is on sale than Brand X.(R)	.72ª
Perceived community-brand similarity (Cronbach's $\alpha = .90$)	.72
There is similarity between personality of typical members from	.81
Brand Community X and personality of Brand X.	.01
There is similarity between values of Brand Community X and values	.86
of Brand X.	.00
There is similarity between style of Brand Community X and style of	.89
Brand X.	
There is similarity between feeling to Brand Community X and feeling	.87
to Brand X.	
There is nothing similar between Brand Community X and Brand X. (R)	.61ª
Overall model fit: $\chi^2(499) = 1797.88$, $\chi^2/df = 3.60$, p<.01; CFI = .91;	
NNFI = .90; IFI = .91; RMSEA = .077	

Notes: (R) indicates a reverse question. SFL means standardized factor loadings.

^a For the loadings of reverse questions, the response data are subtracted by 7.

Table 3Construct measure descriptive statistics.

Variables	1	2	3	4	5	6	7	8
1. Brand community identification	.82							
2. Brand community commitment	.71**	.88						
3. Perceived community-brand similarity	.36**	.41**	.85					
4. Brand identification	.48**	.41**	.48**	.85				
5. Brand commitment	.28**	.38**	.48**	.59**	.87			
6. Affect	.44**	.54**	.55**	.60**	.64**	.92		
7. Connection	.36**	.43**	.51**	.65**	.66**	.70**	.92	
8. Passion	.34**	.40**	.50**	.67**	.68**	.70**	.81*	* .93
Mean	4.94	4.99	4.10	4.02	4.04	4.78	3.54	3.70
Standard deviation	.87	.88	1.04	1.13	1.10	.95	1.26	1.31
Composite reliability	.93	.95	.93	.90	.93	.96	.94	.95
AVE	.68	.78	.73	.72	.76	.85	.85	.87

Notes: n = 437. Bold figures on the diagonal are the square root of the AVE for the constructs. Correlations among the first-order factors measuring brand attachment are shown in highlighted gray.

4.2.1. Main effects

Model 1 describes all the main effects. According to the results, the positive effect of brand community identification on brand community commitment is significant (β =.71, t=19.39, p<.01), supporting H₁. The results also support H₂; a significant, positive effect of brand identification on brand commitment exists (β =.53, t=12.23, p<.01). A positive relationship also exists between brand community identification and brand identification (β =.47, t=13.82, p<.01), supporting H₃. Brand community commitment's influence on brand commitment in Model 1 is positive (β =.18, t=4.11, p<.01), supporting H₄ in Model 1.

4.2.2. Mediating effects

Baron and Kenny's (1986) procedures help test brand attachment's mediating effects. First, in Model 1, the relationship between brand community commitment (independent variable) and brand commitment (dependent variable) is significant; second, in Model 2, the relationship between brand community commitment (independent variable) and brand attachment (mediator) also is significant (β =.25, t=7.12, p<.01), supporting H_{5a} . After brand attachment enters Model 2, brand attachment's (mediating) effect on brand commitment (dependent variable) is significant (β =.63, t=13.36, p<.01), supporting H_{5b} ; however the relationship between brand community commitment (independent variable) and brand commitment (dependent variable) is no longer significant (β =.02, t=.77,

n.s.), rejecting H₄. The results show brand attachment plays a full mediating role between brand community commitment and brand commitment, supporting H_{5c}. Similarly, after brand attachment enters Model 2, the relationship between brand identification (independent variable) and brand attachment (mediator) is significant (β =.60, t=18.18, p<.01), supporting H_{6a}; however, brand identification's effect (independent variable) on brand commitment (dependent variable) drops substantially (in Model 1: β =.53, t=12.23, p<.01; in Model 2: β =.15, t=2.65, p<.01). These results suggest brand attachment plays a partial mediating role between brand identification and brand commitment, supporting H_{6b}.

4.2.3. Moderating effects

Following Baron and Kenny (1986), the empirical study determines perceived community–brand similarity's moderating role according to the significance of the interaction terms in Model 3. Among three hypothesized moderating effects, H_{7c} does not pass the test. Perceived community–brand similarity positively moderates both t brand community identification's effect on brand identification and brand community commitment's effect on brand attachment (H_{7a} : $\beta = .14$, t = 3.53, p < .01; H_{7b} : $\beta = .07$, t = 2.01, p < .05). However, no moderating effect exists between brand community commitment and brand commitment (H_{7c} : $\beta = .02$, t = .64, n.s.).

5. Discussion

5.1. Theoretical implications

This research's main objective is to uncover the intermediate mechanism mediating and/or moderating brand community's effects on brand relationships. The results show consumer brand attachment serves as such a full mediator connecting consumer brand community commitment with consumer brand commitment. In addition, the match between community characteristics and brand traits partially moderates such mediation effects.

This study contributes to brand literature in three aspects. First, consumer commitment to a brand community does not automatically translate into consumer brand commitment. Without cultivating consumer emotion or attachment, consumers in a brand community may not necessarily become brand committed or loyal. Second, brand identification may not lead to brand commitment. In essence, brand identification serves as a channel to express self-imagery, bringing consumer social value or symbolic utility. However, consumers likely buy

Table 4Tests of hypotheses.

	Model 1: main effects		Model 2: mediation eff	fects	Model 3: moderation effects		
Hypothesized paths	Path coefficients	<i>t</i> -value	Path coefficients	<i>t</i> -value	Path coefficients	<i>t</i> -value	
$H_1: BCI \rightarrow BCC$.71**	19.39	.71**	18.59	.71**	19.13	
$H_2: BI \rightarrow BC$.53**	12.23	.15**	2.65	.14*	2.30	
H ₃ : BCI → BI	.47**	13.82	.47**	13.13	.35**	8.92	
H_4 : BCC \rightarrow BC	.18**	4.11	.02	.77	.02	.64	
H_{5a} : BCC \rightarrow BA	_	_	.25**	7.12	.21**	5.58	
H_{5b} : BA \rightarrow BC	_	_	.63**	13.36	.60**	11.55	
H_{6a} : BI \rightarrow BA	_	_	.60**	18.18	.48**	12.36	
H_{7a} : BCI \times PCS \rightarrow BI	_	_	_	_	.14**	3.53	
H_{7b} : BCC \times PCS \rightarrow BA	_	_	_	_	.07*	2.01	
H_{7c} : BCC \times PCS \rightarrow BC	_	_	_	_	.02	.64	
R^2							
BCC	.51		.51		.51		
BA	-		.55		.60		
BI	.22		.22		.37		
BC	.39		.56		.57		

Notes: BCI = brand community identification, BCC = brand community commitment, PCS = perceived community-brand similarity, BA = brand attachment, BI = brand identification, and BC = brand commitment. The tested results of the mediation effects (H_{5c} and H_{6b}) are not reported in the table.

^{**}p<.01 (two-tailed test).

^{*} p<.05 (two-tailed test).

^{**} p < .01 (two-tailed test).

what they like based on brand love rather than brand identification. For example, Harley-Davidson motorcycle owners build intimate relationships with the brand not only because they identify with the brand but also because they are attached to the brand (they love the brand).

Therefore, brand identification without the accompanying emotion may not translate into brand commitment. Third, brand community characteristics may affect consumers' brand identification and attachment. The results show that perceived community-brand similarity moderates the relationships both between brand community identification and brand identification and between brand community commitment and brand attachment, but not between brand community commitment and brand commitment. One explanation for these findings might be that the match between community characteristics and brand traits cause consumers to relate to the brand rather than their conation.

5.2. Managerial implications

Brand management through the management of brand community relationships continues to be common in recent years. To manage these relationships effectively, companies must cultivate brand community identification and commitment. The study results suggest brand community identification and commitment lead to brand identification and attachment, respectively. Companies can nurture brand community development by providing resources (e.g., funds, staff, and place). For example, a specialized logo or a flag of a car club, a free web platform, or a promotional activity may help foster members' identification with the car club.

Second, companies should pay special attention to cultivating a cohesive brand community. Members want to share their brand experiences and confirm the values and establish their intimate relationships with others. To achieve these goals, companies should not only provide material assistance, but also deliver care and rewards to the brand community. Sharing consumers' consumption experiences gratify, enrich, and enable them. Consumers become attached to both the community and the brand. Third, perceived community-brand similarity reinforces brand community's impact on brands. Companies should suggest and sponsor some activities for a brand community according to the special style, personality, feeling, and values of the brand. For example, brand community activities such as camping or cross-country racing reinforce brands such as Harley-Davidson, Jeep, and Land Cruiser, but not for Mercedes-Benz or BMW.

5.3. Limitations and further research

Several study limitations suggest directions for future research. The first limitation exists in the sample characteristics. Over 97% of the responses came from male car club members. The narrow sample structure limits the finding's generalizability. The further research should consider more balanced samples and brand communities from different industries. Second, this study focuses on the one-way influence of brand communities on brand relationships without exploring the reverse influence. According to Algesheimer et al. (2005), brand relationship quality influences brand community identification. In other words, the relationships between brand communities and brands might be bidirectional. Consumers' love for the brand might drive their brand community participation. Future research should employ a longitudinal design to capture brand community relationship dynamics.

References

Aaker J. Dimensions of brand personality. J Mark Res 1997;24(3):347–56. Ahluwalia R, Burnkrant R, Unnava R. Consumer response to negative publicity: The moderating role of commitment. J Mark Res 2000;37(May):203–14.

- Algesheimer R, Dholakia UM, Herrmann A. The social influence of brand community. J Mark 2005;69(3):19–34.
- Bagozzi RP, Dholakia UM. Antecedents and purchase consequences of customer participation in small group brand communities. Int | Res Mark 2006;23:45–61.
- Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. J Pers Soc Psychol 1986;51:1173–82.
- Bhattacharya CB, Sen S. Consumer-company identification: A framework for understanding consumers' relationships with companies. J Mark 2003;67(2):76–88.
- Bowlby J. The making and breaking of affectional bonds. London: Tavistock; 1979.
- Carlson BD, Suter TA, Brown TJ. Social versus psychological brand community: The role of psychological sense of brand community. J Bus Res 2008;4:284–91.
- Carroll BA, Ahuvia AC. Some antecedents and outcomes of brand Love. Mark Lett 2006:17:79–89.
- Churchill JGA. A paradigm for developing better measures of marketing constructs. J Mark Res 1979;16(1):64–73.
- Ensher EA, Muphy SE. Effects of race, gender, perceived similarity, and contact on mentor relationships. J Vocat Behav 1997;50:460–81.
- Escalas JE, Bettman JR. You are what they eat, the influence of reference groups on consumers' connections to brands. J Consum Psychol 2003;3:339–48.
- Fornell C, Larker DF. Evaluating structural equation models with unobservable variables and measurement error. J Mark Res 1981;18(1):39–50.
- Fournier S, Lee L. Getting brand communities right. Harv Bus Rev 2009:105–11. April. Huang X, lun J. The impact of subordinate-supervisor similarity in growth-need strength on work outcomes: The mediating role of perceived similarity. J Organ Behav 2006:27:1121–48.
- Jang H, Olfman L, Ko I, Koh J, Kim K. The influence of on-line brand community characteristics on community commitment and brand loyalty. Int J Electron Commer 2008;3(Spring):57–80.
- Kim CK, Han D, Park S. The effect of brand personality and brand identification on brand loyalty: applying the theory of social identification. Jpn Psychol Res 2001;43(4): 195–206.
- Kim JW, Choi J, Qualls W, Han K. It takes a marketplace community to raise brand commitment: The role of online communities. J Mark Manage 2008;3–4:409–31.
- Kleine SS, Baker SM. An integrative review of material possession attachment. Acad Mark Sci Rev 2004;1:1–36.
- Mael F, Ashforth BE. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. J Organ Behav 1992;13:103–23.
- Mathwick C, Wiertz C, de Ruyter K. Social capital production in a virtual P3 community. J Consum Res 2008;34(April):832–49.
- McAlexander JH, Schouten JW, Koenig HF. Building brand community. J Mark 2002;66(1):38-54.
- McWilliam G. Building stronger brands through online communities. Sloan Manage Rev 2000;3:43–54.
- Meyer JP, Allen NJ. A three-component conceptualization of organizational commitment. Hum Resour Manage Rev 1991;1:61–89.
- Mikulincer M, Hirschberger G, Nachmias O, Gillath O. The affective component of the secure base schema: Affective priming with representations of attachment security. J Pers Soc Psychol 2001;81:305–21.
- Milas G, Mlačić B. Brand personality and human personality: Findings from ratings of familiar Croatian brands. J Bus Res 2007;60:620–6.
- Muniz AM, O'Guinn TC. Brand community. J Consum Res 2001;27:412–32.
- Nunnally JC. Psychometric theory. New York: McGraw-Hill; 1978.
- Park CW, MacInnis DJ, Priester J. Beyond attitudes: Attachment and consumer behavior. Seoul I Bus 2007:2:3–35.
- Park CW, MacInnis DJ, Priester J, Eisingerich AB, Iacobucci D. Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. J Mark 2010;74(November):1–17.
- Raju S, Unnava HR, Montgomery NV. J Consum Res 2009;5(February):851-63.
- Ringle CM, Wende S, Will S. SmartPLS 2.0 (M3) Beta, Hamburg. http://www.smartpls.de 2005.
- Scarpi D. Does size matter? An examination of small and large web-based brand communities. J Interact Mark 2010;24(1):14–21.
- communities. J Interact Mark 2010;24(1):14–21.

 Schau HJ, Muniz AMJ. Brand communities and personal identities: Negotiations in cyberspace. Adv Consum Res 2002;29:344–9.
- Schau HJ, Muniz AM, Arnould EJ. How brand community practices create value. J Mark 2009;73(5):30–51.
- Schouten JW, McAlexander JH. Subcultures of consumption: An ethnography of the new bikers. | Consum Res 1995;22(|une):43-61.
- Schouten JW, McAlexander JH, Koenig HF. Transcendent customer experience and brand community. J Acad Mark Sci 2007;3:357–68.
- Stokburger-Sauer N. Brand community: Drivers and outcomes. Psychol Mark 2010;4(April):347–68.
- Thomson M, MacInnis DJ, Park CW. The ties that bind: The strength of consumers' emotional attachments to brands. J Consum Psychol 2005;1:77–91.
- Wang G. Attitudinal correlates of brand commitment: An empirical study. J Relat Mark 2002;1(2):57–75.
- Wan-Huggins VN, Riordan CM, Griffeth RW. The development and longitudinal test of a model of organizational identification. J Appl Soc Psychol 1998;28(8):724–49.
- Wasko M, Faraj S. Why should I share? Examining knowledge contribution in electronic networks of practice, MIS O 2005;29(1):1–23.