

OPPOSITIONAL BRAND LOYALTY IN ONLINE BRAND COMMUNITIES: PERSPECTIVES ON SOCIAL IDENTITY THEORY AND CONSUMER-BRAND RELATIONSHIP

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ABSTRACT

Oppositional brand loyalty is a psychological phenomenon observed among members of a brand community who hold negative and opposing views about rival brands, and even exhibit antagonistic behaviors towards those brands. The research of oppositional brand loyalty is in its infancy and requires deeper investigation. This study employs social identity theory and consumer-brand relationship as a theoretical framework to verify the formation process of oppositional brand loyalty. Using a sample of online automobile communities in Taiwan, we collected 232 valid samples and analyzed the data using structural equation modeling (SEM) techniques. The results indicate that members who identify with their online brand community develop brand commitment and self-brand connection, which lead to oppositional brand loyalty. Furthermore, brand commitment partially mediated and self-brand connection fully mediated the relationship between brand community identification and oppositional brand loyalty. Based on these findings, theoretical and practical implications are discussed.

Keywords: Online brand community; Social identity theory; Consumer-brand relationship; Oppositional brand loyalty

1. Introduction

A brand community is a specialized group built upon a structured set of social relations among admirers of products or services of a specific brand [Muniz & O'Guinn, 2001]. Communities with these characteristics can offer opportunities for brand management. A successful brand community can help strengthen consumers' brand loyalty and serve as a channel for communication and knowledge exchange between businesses and consumers, as well as among consumers [Andersen, 2005].

Established on the Internet, online brand communities transcend geographical barriers. Non-members can access the same information available to members, increasing the likelihood that they will gradually identify with and become members of the community [Algesheimer et al., 2005]. Subsequently, these communities can spark a sense of belonging within individuals, even if without direct interaction with other members [Carlson et al., 2008]. Empirical research has found that consumers who are involved in brand communities tend to have a deeper and closer relationship with the brand than those who are not [Kim et al., 2008]. Online brand communities function not only as a channel for businesses to communicate with customers, but also as an important tool for building customer relations.

In most industries, numerous brands are marketed within the same product or service category. If products or services offered by different brands are interchangeable, those brands will gradually become rivals in the same market. Oppositional brand loyalty is a psychological phenomenon observed among members of a brand community who hold negative and opposing views about rival brands, and even exhibit antagonistic behaviors toward them [Muniz & Hamer, 2001; Muniz & O'Guinn, 2001]. Members with oppositional brand loyalty are characterized by not only a high loyalty to their supported brand, but also a voluntary opposition and hostility towards rival brands [Kuo & Feng, 2013; Muniz & Hamer, 2001; Thompson & Sinha, 2008]. For example, in an online discussion forum in Taiwan, we

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observed users and supporters of Ford and Toyota actively criticizing the other brand and advocating their own product. Loyal Ford consumers criticized Toyota, citing that its vehicles were lower in safety since the company removed safety features for cost reduction and used a thinner body shell and panel for better fuel consumption. Even though Toyota's fuel consumption performance is higher, Ford advocates still state that they will not buy any Toyota product. On the other hand, Toyota customers criticized Ford for poor vehicle reliability and lubricant leaking. In short, these consumers will not purchase a product from the rival brand, even if the product is considered better overall. Such conversations regardless of time or location rely on the Internet, which provides easy accessibility and rapid responses for advocates of each brand. Moreover, participation by members with oppositional brand loyalty in community activities (e.g., sharing negative views about rival brands) may encourage current consumers to reinforce their support for the brand and avoid rivals, ultimately resulting in a more consolidated relationship between consumers and the brand [Thompson & Sinha, 2008].

In 1988, Belk introduced the concept of the extended self, suggesting that consumers view their possessions as components of their identity that reflect or highlight their personality to the world. Therefore, businesses endeavor to differentiate their brand from competitors by establishing a distinct image and personality. When customers wish to express their individuality through the extended self, their choice between specific brands that define their personality becomes straightforward. For example, because automobiles are directly associated with one's personality and tastes [Lee, 2009], consumers can utilize vehicles in perceptible ways, motivated by their desire to reflect who they are through the brand [Ferraro et al., 2013]. Oppositional brand loyalty can, therefore, be more easily observed in brand communities of automobile products [Ewing et al., 2013; Kuo & Feng, 2013; Muniz & O'Guinn, 2001].

For businesses, such oppositional brand loyalty offers an important benefit to their operations. Although Muniz and O'Guinn [2001] first introduced oppositional brand loyalty more than a decade ago, extant research based mainly on data from qualitative interviews and semantic analyses is still in the early stages [Kuo & Feng, 2013]. For example, after interviewing members of the Macintosh and Saab brand communities, Muniz and O'Guinn [2001] indicated that many members of the Macintosh community exhibited an opposition to PCs, PC users, and the PC software conglomerate Microsoft, and that several members of the Saab community shared an opposition to Volvo. Muniz and Hamer [2001], Thompson and Sinha [2008], and Ewing et al. [2013] analyzed brand communities using messages posted in online forums dedicated to specific brands, and observed oppositional brand loyalty behavior. Empirical research on related topics is still rare. Only Kuo and Feng [2013] applied social exchange theory to existing knowledge on relational marketing to examine the formation process of oppositional brand loyalty in online brand communities, indicate that community commitment forms oppositional brand loyalty. However, their research can only explain 10% of variance of oppositional brand loyalty, and their study suggested that other important factors affect this phenomenon. Hence, further investigation into oppositional brand loyalty in online brand communities is necessary.

Over the past decade many scholars [e.g., Algesheimer et al., 2005; Casaló et al., 2010; Hickman & Ward, 2007; McAlexander et al., 2002; Muniz & O'Guinn, 2001] have studied brand communities and their effects on the brand itself, contributing to a growth in related research in recent years. Others examined the relationship between members and the brand community and explored psychological factors affecting this relationship [Marchi et al., 2011; Tuškej et al., 2013; Zhou et al., 2012]. Previous research has confirmed the positive effects of brand communities on brand management, such as increasing brand loyalty [Scarpi, 2010; Marzocchi et al., 2013], commitment [Zhou et al., 2012], and word-of-mouth [Cheung & Lee, 2012; Hudson et al., 2015]. Many scholars [e.g., Cheung & Lee, 2012; Hudson et al., 2015; Marzocchi et al., 2013; Scarpi, 2010; Zhou et al., 2012] applied such factors as the ultimate dependent variables in their studies. However, the subsequent behavior that arises after consumers have positive perceptions of a brand have not been examined in depth [Sutikno, 2011]. Muniz and O'Guinn [2001] indicated that a strong brand community leads to hyper-loyalty, which refers to all the benefits that loyalty implies [McAlexander & Schouten, 1998]. Since oppositional brand loyalty could be a possible option for hyper-loyalty [Muniz & Hammer, 2001], this study views such loyalty as a subsequent behavior that occurs after consumers experience positive perceptions or reactions toward a brand.

Social identity theory states that individuals in favor of a specific brand may develop a sense of belonging to its community by confirming their true loyalty through participation in the group. Such participants favor the in-group and view the out-group as relatively inferior to boost confidence and self-esteem [Tajfel, 1974; Tajfel & Turner, 1985]. This in-group favoritism behavior is similar to the oppositional brand loyalty observed by Muniz and O'Guinn [2001] in brand communities. In this paper, we apply social identity theory and consumer-brand relationship to explore the factors that affect oppositional brand loyalty in online brand communities. This study not only positions the contributions of oppositional brand loyalty studies within the large scope of brand loyalty research, but also enriches the existing literature by proposing a theoretical model that explains the oppositional brand loyalty within community members of the same brand. Based on the results, this study provides theoretical and practical implications and suggests directions for future research.

2. Theoretical Background and Hypothesis Development

In this paper, we employ social identity theory as an existing framework for consumer-brand relationship to develop a conceptual model for empirical research. Social identity theory proposes that identity stems from not only one's personal preferences and capabilities, but also one's perceived connections with society [Tajfel, 1974; Tajfel & Turner, 1985]. Individuals tend to categorize themselves into a specific group based on certain characteristics such as lifestyle, occupation, or education. Through this categorization process, they can better understand and define their identities, while also classifying others into in-groups or out-groups. This process allows individuals to outline their current social environment and distinguish their positions in the society [Tajfel, 1974; Tajfel & Turner, 1985]. Many studies of brand communities, including Algesheimer et al. [2005], Bagozzi and Dholakia [2006], Heere et al. [2011], McAlexander et al. [2002], Wei & Yu [2012], and Vernuccio et al. [2015], incorporate social identity theory into their research. These scholars indicated that members of brand communities view themselves as a part of the group and employ both the community and the brand to find self-definition. Their relationship with the brand community or the brand itself may be reinforced through this process. Moreover, research based on social identity theory indicates that brands with images consistent with an in-group enhance consumers' self-brand connection [Esclas & Bettman, 2003, 2005; Wei & Yu, 2012].

Social identity theory also suggests that individuals who categorize themselves into a specific group usually consider the group's performance relevant to their personal self-esteem [Tajfel, 1979; Tajfel & Turner, 1985]. Therefore, they are inclined to overestimate the performance of the group to which they belong and underestimate the performance of competitor groups [Tajfel, 1979; Tajfel & Turner, 1985]. In other words, brand community members tend to provide a positive evaluation of their community or brand, viewing rival brands or their communities as inferior. Brand communities, thus, create a positive environment for cultivating oppositional brand loyalty. In general, in-group favoritism in social identity theory is similar to the oppositional brand loyalty observed in brand communities. Since social identity theory helps to clarify such loyalty in these communities, we will ground our model in consumer identification, including brand community identification and self-brand connection, to delineate the relationships between brands, brand communities, and consumers.

Consumer-brand relationship refers to "the tie between a person and a brand that is voluntary or is enforced interdependently between the person and the brand" [Chang & Chieng, 2006, p. 935]. Literature on consumer-brand relationship provides a foundation for the proposed model. This research model is built upon consumers' identification with brand communities in order to examine whether brand community identification is positively related to the development of brand commitment, self-brand connection, and oppositional brand loyalty. This section offers a review of the literature concerning oppositional brand loyalty and the major consumer-brand relationship constructs (such as brand commitment and self-brand connection), as well as the theoretical rationale for causal relationships in the proposed model.

2.1. Brand Communities and Online Brand Communities

Any community relies on relationships between its members, usually based on certain commonalities or identifications [McAlexander et al., 2002]. For example, people who reside in the same neighborhood or are followers of a celebrity may form a community together. A brand community is formed by admirers of products or services of a specific brand and is not bound by geographical limitations. The core components of a brand community include consciousness of kind, shared rituals and traditions, and sense of moral responsibility [Muniz & O'Guinn, 2001]. Brand community members are not only loyal participants in the group, but also are potential buyers of the same products [Scarpi, 2010]. For businesses, discussions within the community can offer solutions to customers' problems, provide innovative ideas [Marchi et al., 2011], or indirectly induce loyalty behavior, such as higher purchase intention and positive word-of-mouth [Kim et al., 2008]. In any brand community, the content from consumers (user-generated content, i.e. UGC) and marketers (marketer-generated content, i.e. MGC) may have varying effects. However, both forms of community content have an impact on consumers' buying behavior [Goh et al., 2013]. In other words, brand communities are influential for brand management.

The rapid development of the Internet and its ability to transmit information without boundaries has facilitated the development of online brand communities. Members who do not know each other can easily create online communities and activities. Interaction plays an important role in online brand community [Wang et al., 2013]. Moreover, even without in-person interaction, members feel a sense of belonging to the community [Carlson et al., 2008]. This phenomenon explains why consumers who join a brand community tend to experience a more consolidated relationship with the brand than non-members [Kim et al., 2008]. The fast growth of online brand communities in recent years, therefore, is an issue worth greater academic attention.

2.2. Oppositional Brand Loyalty

Oppositional brand loyalty refers to brand community members who avoid or reject recommendations to use products from rival brands [Ewing et al., 2013; Kuo & Feng, 2013; Muniz & Hamer, 2001; Muniz & O'Guinn, 2001];

Thompson & Sinha, 2008]. These community members define themselves not only in terms of who they are, but also who they are not [Ewing et al., 2013; Muniz & Hamer, 2001]. Muniz and O'Guinn [2001] first introduced the idea of oppositional brand loyalty by proposing that this behavior stems from consciousness of kind, which brand community members rely on to differentiate objects relevant or oppositional to the brand. These researchers illustrated the phenomenon with an example of a community devoted to Macintosh computers in which members usually viewed Microsoft as a competitor. In this way, the competitor serves as a subject for comparison. While criticizing Microsoft and defending Macintosh, community members become more consolidated and increased their consciousness of kind. As a result, they took an oppositional view towards Microsoft.

Consumers are impelled to classify brands that offer similar products or services into two kinds: the brands they buy and the brands they do not buy. This classification reflects their loyalty to their favorite brands [Muniz & Hamer, 2001]; for instance, most consumers decide between Coca-Cola or Pepsi in their choice of cola drinks. To signal that their favorite brand is superior, customers may criticize brands they do not buy or claim that those who choose other brands make incorrect decisions. This kind of perception and behavior is associated with oppositional brand loyalty [Muniz & Hamer, 2001]. Brand communities unite supporters of the same brand and offer them a channel for communication. Empirical results have confirmed that consumers with a long-term relationship with a brand community will actively avoid products or services of rival brands, implying that brand communities are more consolidated in a competitive market [Ewing et al., 2013; Thompson & Sinha, 2008]. Typical brand loyalty refers to a consumer's attachment or devotion to a brand [Aaker, 1991], and is a psychological phenomenon that affects how consumers choose the brands they want to purchase. In addition, oppositional brand loyalty influences consumers' refusal to choose a rival brand and active display of an offensive attitude toward these brands, as seen in online comments [Kuo & Feng, 2013; Muniz & Hamer, 2001]. In contrast, compared to typical brand loyalty, oppositional brand loyalty is more active. Muniz and O'Guinn [2001] argued that a strong brand community leads to hyper-loyalty, which refers to all the benefits that loyalty implies [McAlexander & Schouten, 1998]. Thus, oppositional brand loyalty can be an option for hyper-loyalty [Muniz & Hammer, 2001]. Kuo and Feng [2013] first developed a scale for measuring oppositional brand loyalty and found that community commitment is an important factor for the formation of oppositional brand loyalty in an online brand community context. It can be inferred that brand communities and oppositional brand loyalty are mutually supportive.

2.3. Brand Community Identification and Brand Commitment

Brand community identification is the individual consciousness of belonging to a brand community in which the consumers perceive themselves as an actual or symbolic member of the group [Mael & Ashforth, 1992; Scarpi, 2010]. Brand community members usually display similar preferences for the same brand, buy products from that brand, share experiences and values, and interact with other members. Thus, these participants develop a consciousness of kind and experience connections with other members until they gradually identify with the community. This process can also be described as the overlap between users' values and values created by the brand community [Carlson et al., 2008; McAlexander et al., 2002; Scarpi, 2010; Zhou et al., 2012].

Brand commitment is a psychological attachment that drives consumers to maintain a close relationship with the brand and view the brand as the primary choice in its class [Coulter et al., 2003; Fournier, 1998]. This topic focuses not only on consumer brand loyalty, but also on the positive attitude and significant effort of consumers to sustain the relationship between brand and consumer [Ahluwalia, 2000; Delgado-Ballester & Munuera-Alemán, 2001; Eisingerich & Rubera, 2010; Fournier, 1998]. Customers with brand commitment are more susceptible to and can better accept ideas delivered by the brand [Pillai & Goldsmith, 2008]. As consumers with brand commitment are not easily influenced by rival brands, it is difficult for competitors to communicate messages to them [Raju et al., 2009]. Hence, supporting brand commitment in consumers is an important business technique [Kim et al., 2008; Turri, 2013].

Brand community identification involves the value of three entities: consumers, brand community, and brand [Carlson et al., 2008]. Empirical evidence [e.g., Bagozzi & Dholakia, 2006; Escalas & Bettman, 2003; Stokburger-Sauer, 2010] has indicated that since brand communities serve as a platform for sharing brand experiences and values, they may reinforce consumers' brand cognition and attitude, thus strengthening their positive thoughts and recognition with the brand. Moreover, consumers identify the brand community as the overlap between consumers' own image and the image of the community. Since brand is a core component of brand community, consumers who identify with these groups may possess positive thoughts about the related brand [Bagozzi & Dholakia, 2006; Escalas & Bettman, 2003; Stokburger-Sauer, 2010]. Brand community identification develops when consumers perceive a common ground between their own value and the value of the brand community, while identifying themselves as members of the group [Carlson et al., 2008; McAlexander et al., 2002; Scarpi, 2010; Zhou et al., 2012]. Brand community provides an environment in which consumers can share their consumption experience, and as a result consumers and brands are brought closer together [McAlexander et al., 2002]. In the same way, brand community identification develops a higher community engagement between community members [Algesheimer et al., 2005]. The community

participation of consumers has a significant influence on brand commitment, and empirical research shows that members' experience of attachment to their brand community results in brand commitment [Kim et al., 2008]. Thus, we hypothesize the following:

H1. *Brand community identification has a positive effect on brand commitment.*

2.4. Self-Brand Connection

Self-brand connection refers to consumers who not only identify with a specific brand, but also incorporate such brand into their self-concept [Escalas, 2004; Escalas & Bettman, 2003, 2005]. When consumers discover a brand image that parallels the image they expect to have about themselves--that is, when the brand image matches their real or ideal self, they are likely to identify with the brand [Sutikno, 2011; Tuškej et al., 2013]. Like human beings, different brands exhibit different personalities through their wish to differentiate from others [He et al., 2012; Kuenzel & Halliday, 2010; Louis & Lombart, 2010]. By creating distinctions, each brand endeavors to present unique features that, in turn, contribute to its personality and allow for consumers to distinguish one brand from all others. Consumers identify with a brand when they are attracted to its personality or perceive a match between the brand's individuality and their own [He et al., 2012; Kuenzel & Halliday, 2010; Louis & Lombart, 2010].

Consumers with self-brand connection view the brand as an important component of their personality or implement the brand to communicate their personality to others [Cheng et al., 2012; Escalas, 2004; Escalas & Bettman, 2003, 2005]. In other words, they see the brand as a proxy and use their brand choice to individualize themselves [Escalas, 2004; Escalas & Bettman, 2003, 2005]. Cheng et al. [2012] conducted an in-depth study of the meanings and applications of self-brand connection, indicating that consumers with strong self-brand connection not only view the brand as an element of personality construction, but also view any brand failure as their own failure. Their relationship with the brand is so intimate that they treat the brand as if it were their own.

Previous studies [Escalas & Bettman, 2003, 2005; Wei & Yu, 2012] pointed out that the reference group to which users belong affects the strength of their self-brand connection. When consumers experience a high congruency between the brand image and in-group image, this affiliation will foster stronger self-brand connection [Wei & Yu, 2012]. That is, consumers may form stronger self-brand connection when use of the brand is prevalent among members of a group to which they belong. This process allows consumers to verify themselves as possessing identical traits with other members in that group. Moreover, the meaning of a brand can be expressed through narrative processing [Escalas, 2004]. Brand community identification encourages members to share their consumption experiences, which forms a vivid image of the product. Through the narrative process, a brand can become more important and valuable to consumers and connect directly to customers [Escalas, 2004]. The brand becomes a symbol of their self-identity and an inseparable part of themselves [Escalas, 2004; Tuškej et al. 2013; Zhou et al., 2012]. Thus, we hypothesize the following:

H2. *Brand community identification has a positive effect on self-brand connection.*

Self-brand connection develops when consumers perceive an overlap between the values of a brand and their own values or ideal images [He et al., 2012; Kuenzel & Halliday, 2010; Louis & Lombart, 2010]. Consumers usually view a brand as an individual with a personality and experience stronger intentions to maintain loyal to a brand when its image parallels their own personality [He et al., 2012; Kuenzel & Halliday, 2010]. Consumers with self-brand connection feel a sense of oneness with the brand and possess positive attitudes and behavioral intentions toward the brand [Escalas, 2004; Escalas & Bettman, 2003; Ferraro et al., 2013]. Thus, we hypothesize the following.

H3. *Self-brand connection has a positive effect on brand commitment.*

Consumers with high brand commitment are more easily affected by messages from the company to which they are committed [Pillai & Goldsmith, 2008]. Raju et al. [2009] found that consumers with high brand commitment tend to resist or hold an oppositional opinion of rival brands by comparison. They are eager to identify drawbacks in the rival products to prove that their brand is comparatively superior. This finding suggests that consumers with high brand commitment are more likely to possess oppositional perceptions of rival brands.

Consumers with strong self-brand connection usually use their brand choice to reflect their personality and distinction from others [Escalas, 2004]. Conceptually, self-brand connection is similar to consciousness of kind, as both will result in greater differentiation of the self from others and stronger opposition toward rival brands. As mentioned earlier, consumers with strong self-brand connection view the brand they support as a component of themselves, treat the brand as if it were their own, and view failures of the brand as their own [Cheng et al., 2012]. Under this condition, it is likely that these individuals view rival brands as oppositions to themselves. Therefore, we infer that members of brand communities may take an oppositional view of rival brands in order to defend the brand to which they are connected. Thus, we hypothesize the following:

H4. *Brand commitment has a positive effect on oppositional brand loyalty.*

H5. *Self-brand connection has a positive effect on oppositional brand loyalty.*

3. Research Methodology

3.1. Measures

All measurement scale items were obtained from previous validated scales, and were modified to ensure their relevancy to the online automobile community context. The scale for brand community identification was adapted from Algesheimer et al. [2005] and Zhou et al. [2012]. The scale for brand commitment was adapted from Ahluwalia [2000] and Raju et al. [2009]. The scale for self-brand connection was adapted from Escalas and Bettman [2003]. The scale for oppositional brand loyalty was adapted from Muniz and Hamer [2001], Thompson and Sinha [2008], and Kuo and Feng [2013]. To reduce the likelihood of common method bias, we followed the guidelines suggested by Podsakoff et al. [2003]. For example, respondents were assured of their anonymity and confidentiality, that there are no right or wrong answers, and that they should answer as honestly as possible. A translation and back-translation procedure and discussions with experts (including five professors and five car community members) were conducted to remove ambiguous phrasing in the questionnaires so that respondents could understand the questions in the formal survey and the content validity of the questionnaire could be ensured. Questionnaire items were randomized within the instrument to limit the ability for participants to detect underlying patterns that could influence their answers. All of the measurement items used a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The scales are shown in Table 1.

Table 1: Survey Instrument

Construct	Indicator	Measurement	References
Brand community identification	BCI_1	I usually use “we” instead of “they” when I talk about Brand Community XYZ.	Algesheimer et al. [2005] Zhou et al. [2012]
	BCI_2	I see myself as a part of Brand Community XYZ.	
	BCI_3	I take the success of Brand Community XYZ as mine.	
	BCI_4	I feel complimented when I hear good remarks about Brand Community XYZ.	
	BCI_5	I feel insulted when I hear bad remarks about Brand Community XYZ.	
	BCI_6	I have a great interest in “how others think about Brand Community XYZ”.	
Brand commitment	BC_1	I feel upset when I cannot get a product of Brand XYZ I want to buy.	Ahluwalia [2000] Raju et al. [2009]
	BC_2	I am a loyalty customer (user) of Brand XYZ.	
	BC_3	Brand XYZ is the best choice of mine.	
Self-brand connection	SBC_1	Brand XYZ reflects who I am.	Escalas & Bettman [2003]
	SBC_2	I perceive personal connections between Brand XYZ and myself.	
	SBC_3	I can use Brand XYZ to communicate who I am to others.	
	SBC_4	Brand XYZ is very suited for me.	
Oppositional brand loyalty	OBL_1	I will not try any rival brand that offers similar products.	Kuo & Feng [2013] Muniz & Hamer [2001] Thompson & Sinha [2008]
	OBL_2	I have no interest in any rival brand even if it offers a diversity of products.	
	OBL_3	I will not consider buying products of any rival brand even if the products can better meet consumers’ specific needs.	
	OBL_4	I will not consider buying products of any rival brand even if the products have better specifications.	
	OBL_5	I will not recommend products of any rival brand even if the products are generally considered better.	
	OBL_6	I will not try products of any rival brand even if the products are widely discussed by other people.	

Before testing the proposed research model, a pilot test was conducted with 50 online domestic automobile community members in Taiwan. We performed an exploratory factor analysis (EFA) with the extraction method of principal component analysis and Varimax with Kaiser normalization as the rotation method to test the survey instrument [Kaiser, 1958]. This process was iterated until an optimal result was obtained. The results of EFA indicated that we do not need to delete any measurement item and items were loaded onto the expected factors. The Cronbach's

alpha value for each construct ranged from 0.832 to 0.944, surpassing the standard threshold value of 0.70 [Nunnally, 1978] and revealing acceptable reliability.

3.2. Survey Administration

Due to the large variety of automobile brands in the market, competition is intense. In Taiwan, supporters of specific car brands in online automobile brand communities often actively criticize other brands or products to advocate for their own brand. Furthermore, the degree of oppositional brand loyalty among supporters of different automobile brands is usually high [Ewing et al., 2013; Kuo & Feng, 2013; Muniz & O'Guinn, 2001]. Therefore, we believed that implementing members of automobile brand communities as subjects fit our research objectives. Since imported and domestic car users may display different behaviors, and most customers in Taiwan purchase domestic cars, we limited our research subjects to members of online brand communities for domestic automobile brands. According to the sales report released by a well-known automobile information website in Taiwan, www.u-car.com.tw, the top five best-selling brands between 2013 and 2015 were Toyota, Nissan, Mitsubishi, Honda, and Ford. These five companies jointly shared more than 65% of the automobile market in Taiwan. We then chose online brand communities dedicated to these five brands. All five brand communities are not official, and the main functions of these communities are to share experiences, hold community events, and announce vehicle recalls. Over the course of four weeks, we administered our questionnaire to members of these five online automobile community websites based on convenience sampling.

For each online automobile community, we created an exclusive URL to customize the brand names in the questionnaire according to the participants' communities. By doing so, participants were more easily involved in the research context, and the efficiency and effectiveness of our sampling was higher. The questionnaire's URL was posted on the most popular forum of each online automobile community. Before the questionnaire was posted, consent from the webmasters of the five communities was obtained. Finally, we also provided gift vouchers to participants to increase the response rate. The survey system was designed to support cookies, recording of IP addresses, timing, and detection of duplicate and valid responses. The sample comprised of 232 valid community members, including 202 males (87.1%) and 30 females (12.9%). Most participants (97.8%) owned at least one car of the brand to which their community was dedicated, and a majority (51.3%) indicated that they belonged to their communities for more than a year. Table 2 summarizes the demographics of the respondents. Since 87.1% of participants are male, we examined the effect of gender on oppositional brand loyalty. The results show that there is no significant difference between male and female participants ($t = 1.430$, $p\text{-value} = 0.154 > 0.05$).

A chi-square test of homogeneity was used to compare community behaviors such as time of weekly community usage, monthly number of posts, and adoption of brand products within different brand communities. No statistically significant differences were noted among the communities in regards to weekly community usage time ($\chi^2 = 29.519$; $p = 0.102$), monthly number of posts ($\chi^2 = 26.783$; $p = 0.178$), and adoption of brand products ($\chi^2 = 6.053$; $p = 0.534$). Hence, the samples from different communities could be combined for subsequent analysis.

Table 2: Demographic Characteristics of Survey Respondents (n=232)

Demographic profile		Frequency	Percent (%)
Gender	Male	202	87.1%
	Female	30	12.9%
Age	Less than 18	0	0%
	19~25	33	14.2%
	26~30	76	32.8%
	31~35	71	30.6%
	36~40	36	15.5%
	41~45	9	3.9%
	46 or above	7	3.0%
Education	High school or below	56	24.1%
	University/college	156	67.2%
	Graduate school	20	8.6%
Industry	Student	9	3.9%
	Military, civil and teaching staff	18	7.8%
	Agricultural, forestry, fishery and husbandry	1	0.4%
	Manufacturing	98	42.2%
	Finance and banking	6	2.6%
	Service	55	23.7%
	Freelance	19	8.2%
	Others	26	11.2%
Monthly discretionary income (NT dollar)	Less than 20,000	11	4.7%
	20,001-50,000	158	68.1%
	50,001-80,000	50	21.6%
	80,001-100,000	8	3.4%
	100,001 or above	5	2.2%
Brand community tenure	Less than 1 month	14	6.0%
	1 month-3 months	31	13.4%
	4 months-1 year	68	29.3%
	1 year or above	119	51.3%
Time of weekly community usage	Less than 1 hour	16	6.9%
	1-3 hours	68	29.3%
	4-6 hours	57	24.6%
	7 hours or above	91	39.2%
Number of posts per month	Less than 5	108	46.6%
	6-12	55	23.7%
	13-20	29	12.5%
	21 or above	40	17.2%
Owned at least one car of the brand	Yes	227	97.8%
	No	5	2.2%

4. Results

The proposed model and its associated hypotheses were tested using structural equation modeling (SEM). Two types of methods, covariance-based techniques (CB-SEM) and variance based partial least squares (PLS-SEM), can be implemented when employing SEM. In this study, we adopted a PLS-SEM approach for the following reasons.

PLS-SEM, which uses component-based estimation, maximizes the variance explained in the dependent variable, does not require multivariate normality of the data, and is less demanding on sample size [Chin, 1998; Falk & Miller, 1992; Gefen et al., 2000; Hair et al., 2011, 2012]. In addition, PLS-SEM is the preferred method for exploratory research, existed theory extension, and theory development [Chin et al., 2003; Gefen et al., 2000; Hair et al., 2011]. The primary research objectives in this study are to explain the variance of the endogenous constructs and develop oppositional brand loyalty theory. Thus, PLS-SEM is appropriate for this study.

The SmartPLS 2.0 software package was used for our estimation. The bootstrapping procedure was implemented to provide reassurance that the results are not sample-specific by using repeated random samples drawn from the data. In this instance, the bootstrapping procedure was repeated until it reached 500 bootstrap samples [Chin, 1998].

4.1. Measurement Model Analysis

The reliability, convergent validity, and discriminant validity of the scale were examined using confirmatory factor analysis (CFA). Table 3 lists the standardized factor loadings, composite reliability (CR), and Cronbach’s alpha values. The loadings for all the constructs with measures were clearly above the 0.70 guideline, indicating satisfactory item reliability for the measures [Hair et al., 1998]. Furthermore, the CR values and Cronbach’s alpha for the constructs both exceeded the recommended level of 0.70, indicating adequate internal consistency [Bagozzi & Yi, 1988; Nunnally, 1978].

Table 3: Standardized Factor Loadings, and CR of the Measurement Model

Construct	Indicator	Loading	Composite reliability	Cronbach’s alpha
Brand community identification	BCI_1	0.763	0.937	0.916
	BCI_2	0.858		
	BCI_3	0.838		
	BCI_4	0.913		
	BCI_5	0.852		
	BCI_6	0.839		
Brand commitment	BC_1	0.832	0.898	0.828
	BC_2	0.876		
	BC_3	0.882		
Self-brand connection	SBC_1	0.901	0.941	0.917
	SBC_2	0.921		
	SBC_3	0.925		
	SBC_4	0.827		
Oppositional brand loyalty	OBL_1	0.886	0.955	0.944
	OBL_2	0.927		
	OBL_3	0.900		
	OBL_4	0.888		
	OBL_5	0.823		
	OBL_6	0.875		

Table 4 includes the mean, standard deviation, average variance extracted (AVE), and square root of the AVE, as well as correlations between the constructs. The AVE values exceeded the suggested threshold value of 0.50, demonstrating the convergent validity of measures [Fornell & Larcker, 1981]. Comparing the square root of the AVE with correlations among the constructs indicates that each construct is more closely related to its own measures than to those of other constructs, which supports discriminant validity [Fornell & Larcker, 1981]. Overall, the evidence of good reliability, convergent validity, and discriminant validity indicates the adequacy of the measurement model.

Table 4: The Mean, Standard Deviation and Inter-variable Correlations.

Construct	Mean	S.D.	AVE	Construct			
				BCI	BC	SBC	OBL
BCI	5.36	1.13	0.714	0.845			
BC	4.93	1.26	0.746	0.656	0.864		
SBC	4.82	1.19	0.800	0.633	0.666	0.894	
OBL	3.72	1.32	0.781	0.329	0.427	0.470	0.884

Note: Diagonal elements show the square root of average variance extracted (AVE).

BCI: brand community identification; BC: brand commitment; SBC: self-brand connection; OBL: oppositional brand loyalty

We further examined variance inflation factors (VIF) to assess the multicollinearity problem. A regression analysis that employed oppositional loyalty as the dependent variable and the other three variables as independent variables was performed. The VIFs range from 2.002 to 2.137 (Table 5), which are well below the suggested threshold of 3.3 [Diamantopoulos & Siguaw, 2006]. Hence, the multicollinearity problem is not a concern for our data.

Table 5: Multicollinearity Analysis

Construct	VIF
BCI	2.002
BC	2.137
SBC	2.015

Common method bias occurs when all data is self-reported and collected via the same questionnaire during the same period of time with cross-sectional research design. To test for common method bias, we employed the Harman's one-factor test [Podsakoff et al., 2003]. The results showed that there was more than one factor and that the first factor accounted for 47% of the variance, lower than the 50% threshold value. We thus conclude that common method bias is not a concern in our study.

4.2. Structural Model Analysis

After establishing the validity of the survey instrument, the hypotheses were tested by using the PLS. To improve the internal validity, we also considered three other factors (brand community tenure, community usage time per week, and number of posts per month) as control variables in determining oppositional brand loyalty. Figure 1 shows the PLS analysis results of the proposed model.

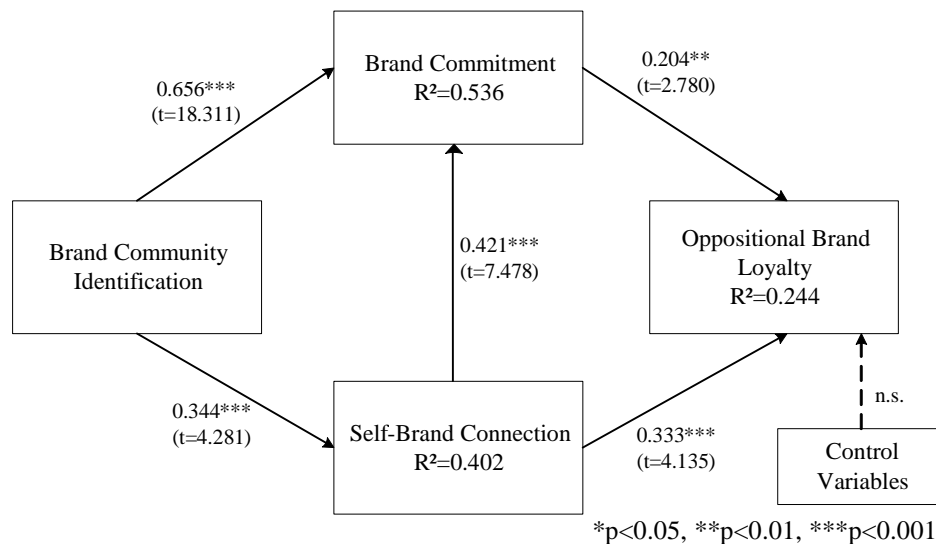


Figure 1: PLS Results of the Model

Regarding the relationship between brand community identification and brand commitment, our findings support H1, which states that brand community identification positively affects brand commitment significantly ($\beta = 0.656$, $t = 18.311$). Brand community identification positively affects self-brand connection ($\beta = 0.344$, $t = 4.281$), and so H2 is also supported. The brand community identification explains 40.2% of the variance of self-brand connection. We can infer that higher brand community identification implies higher self-brand connection. Self-brand connection positively and significantly affects brand commitment ($\beta = 0.421$, $t = 7.478$). Furthermore, 53.6% of the variance of brand commitment can be explained by brand community identification and self-brand connection. These results indicate that brand community identification and self-brand connection can enhance brand commitment.

Finally, the results confirmed that brand commitment ($\beta = 0.204$, $t = 2.780$) and self-brand connection ($\beta = 0.333$, $t = 4.135$) are predictors of oppositional brand loyalty. Thus, H4 and H5 are supported. In other words, online brand community members show a higher oppositional brand loyalty if the members evoke brand commitment and self-brand connection. However, all control variables were found to be insignificant, such as tenure ($\beta = -0.091$, $t = 1.639$), community usage time ($\beta = 0.098$, $t = 1.726$), and number of posts ($\beta = -0.089$, $t = 1.446$). All of these factors together explained 24.4% of the variance in oppositional brand loyalty, which is above the accepted threshold of 10% [Falk & Miller, 1992].

The test results indicate that all the independent variables can explain the dependent variable, which demonstrates that the proposed model displays high reliability and validity in the tests of both the measurement model and structural model. All proposed causal paths exhibited a reasonable direction and all of the proposed hypotheses are supported.

To more deeply understand the role of consumer-brand relationships in forming oppositional brand loyalty, we tested the mediating effects of brand commitment and self-brand connection on the relationship between brand community identification and oppositional brand loyalty, respectively. This study evaluated the mediating effects by calculating the variance accounted for (VAF) value. If the VAF is less than 20%, one should conclude that nearly zero mediation occurs; a situation in which the VAF is larger than 20% and less than 80% could be a partial mediation; and a VAF above 80% indicates a full mediation [Hair et al., 2016]. The results showed that brand commitment is a partial mediator (VAF=72.9%) between brand community identification and oppositional brand loyalty. In addition, self-brand connection is a full mediator (VAF=83.3%) between brand community identification and oppositional brand loyalty.

5. Conclusion and Implications

This study applies social identity theory on consumer-brand relationships to explore the formation process of oppositional brand loyalty among online brand community members. The empirical evidence provides support for our model. Analytical results show that members who identified with a brand community would positively display brand commitment and self-brand connection. We also found a significant and positive relationship between brand commitment and self-brand connection. Moreover, both brand commitment and self-brand connection positively affect oppositional brand loyalty, and self-brand connection creates a stronger oppositional brand loyalty than brand commitment. However, brand commitment is a partial mediator between brand community identification and oppositional brand loyalty. Self-brand connection is a full mediator between brand community identification and oppositional brand loyalty. Based on the research results, we propose theoretical implications, practical implications, limitations, and suggestions for future research.

5.1. Theoretical Implications

This study offers several important implications. First, we offer a new theoretical understanding of the consequence of consumers' positive perceptions about a brand, and contribute to the literature by extending social identity theory and consumer-brand relationship in the context of online brand communities. In previous research of brand consumer behavior, consumers' positive perceptions, such as brand loyalty, brand commitment, and positive word-of-mouth, were measured as the ultimate dependent variables. However, the issue of whether further behavior will occur after consumers experience these positive perceptions has seldom been discussed [Sutikno, 2011]. Previous literature also indicated that a strong brand community leads to hyper-loyalty [Muniz & O'Guinn, 2001]. In this study, we approach oppositional brand loyalty as a subsequent behavior that arises after community members experience positive perceptions or reactions toward a brand in the context of an online brand community. This study positions the contribution of oppositional brand loyalty studies within the larger scope of brand loyalty research.

Second, compared to Kuo and Feng's [2013] application of social exchange theory on how members' perceived benefits of a brand community affect community commitment and oppositional brand loyalty, the present study applied social identity theory on consumer-brand relationship to focus on members' internal identification process and empirically-tested factors affecting oppositional brand loyalty. Our results provide evidence that identification with a brand community influences community members' commitment to the brand and their self-brand connection. Higher brand commitment and self-brand connection in the future will lead to higher oppositional loyalty, together explaining 24.4% of the variance in oppositional brand loyalty. These results are consistent with in-group favoritism behavior and the internal identification process of social identity theory. We thus extend existing social identity theory literature toward a new theoretical context that may enable researchers to explore the influence of reference groups on oppositional loyalty.

Third, we tested the mediating effects of brand commitment and self-brand connection on the relationship between brand community identification and oppositional brand loyalty. This study found that brand commitment serves as a partial mediator and self-brand connection serves as a full mediator. This result indicates that brand community identification influences oppositional brand loyalty indirectly. By comparison, Kuo and Feng [2013] applied social exchange theory to build a model of explanation for oppositional brand loyalty, indicating that community commitment is an antecedent of oppositional brand loyalty but only explaining 10% of its variance. The study of Kuo and Feng [2013] on oppositional brand loyalty has assumed that oppositional brand loyalty is a direct consequence of community matters (community commitment). Modelling major consumer-brand relationship constructs (brand commitment and self-brand connection) as mediators provides a more refined understanding of the causal relationship between community matters and oppositional brand loyalty. Furthermore, explaining the formation process of oppositional brand loyalty from the perspectives of community identification and consumer-brand relationship is stronger than from the perspectives of community benefits and community commitment. This outcome offers a new direction for studies of both brand communities and brand consumers.

5.2. Practical Implications

The question of whether brand communities are helpful for improving the relationship between members and the brand is common among many businesses that have started to operate brand communities. The research results indicate that members who identify with a brand community will very likely commit with and self-connect to the brand. Brand commitment and self-brand connection can nurture oppositional brand loyalty. In other words, brand communities have positive influences on members and the brand itself. The strategy of supporting brand community identification through an online brand community is indeed helpful for brand management; doing so not only ensures customer loyalty, but also motivates members to express an oppositional view of rival brands. Thus, we suggest that businesses devote more effort to operating brand communities and nurturing brand community identification among their members.

Our results argue that members who identify with a brand community are likely to further develop oppositional brand loyalty, which suggests that brand communities are strong environments for cultivating oppositional brand loyalty. Brand commitment and self-brand connection positively affect oppositional brand loyalty, while self-brand connection leads to stronger oppositional brand loyalty than brand commitment does. Brand community members with self-brand connection consider this brand as an important component of themselves, allowing them to easily differentiate from others and become more intimate with the brand. By purchasing such brand, these members manifest their own personal traits and personality. As a result of brands emphasizing their personal traits and personality through marketing strategies, such brand community members believe that this specific brand represents themselves. Therefore, these brand community members will remain loyal to this brand and be unwilling to transfer their dedication to rival brands. Since self-brand connection promotes oppositional brand loyalty, brand managers should develop strategies to incubate members' self-brand connection in online brand communities.

5.3. Research Limitations

Despite our best efforts, this research is constrained by the following limitations. First, we posted the news about our questionnaire survey in well-known online automobile communities to recruit voluntary participants. However, these participants might have been relatively more active in community activities than other members. The discrepancy of whether these active members possessed similar views as less active members, or whether the population of these active members was large enough to represent the entire community, may have affected the representativeness of the sample.

Second, because oppositional brand loyalty is easily observed among competing mainstream brand communities [Ewing et al., 2013; Kuo & Feng, 2013; Tompson & Sinha, 2008] such as communities focused on automobiles [Ewing et al., 2013; Kuo & Feng, 2013; Muniz & O'Guinn, 2001], computers [Muniz & O'Guinn, 2001; Tompson & Sinha, 2008], open source software [Bagozzi & Dholakia, 2006], and cola [Muniz & Hammer, 2001], the adoption of the proposal model may be limited to such brand communities. Nevertheless, due to limited research resources, we were unable to conduct a more extensive survey. We collected data from five different automobile brand communities, but due to a small sample size for each community, we could not test the proposed model within each community and compare the results. In addition, we limited our research subjects to the online automobile brand communities. As online brand communities are numerous and diverse, we could not examine whether consumers' behavior would vary across online brand communities, but this limitation might have affected the external validity of our research. Third, over 87% of the participants in this study originated from male automobile community members. This narrow sample structure limits the generalizability of our results. Finally, a cross-sectional design was adopted, which may not fully capture the characteristics of a brand community over a longer period of time.

5.4. Future Research

This study tests the antecedents of oppositional brand loyalty based on social identity theory. The analytical results indicate that brand commitment and self-brand connection are antecedents of oppositional brand loyalty, but can only explain 24.4% of its variance. Thus, other factors affecting oppositional brand loyalty need to be examined. Kuo and Feng [2013] argued that community commitment is an important aspect of oppositional brand loyalty formation, suggesting the value in discussing the relationship between brand community identification and community commitment. From the perspective of social identity theory, identification is rooted in an individual's categorization of belonging to specific groups. Community commitment refers to members who want to continue a long-term relationship with a brand community. Thus, brand community identification may promote community commitment. In future research, scholars could introduce community commitment to the present model and test the relationship between brand community identification and community commitment.

The subjects of this study were members of online community websites dedicated to a single brand. However, well-known community websites are comprised of a variety of online communities including multiple discussion forums or "multi-forum communities." In our observation of multi-forum communities, we confirmed the presence of three components of brand communities across all forums: consciousness of kind, shared rituals and traditions, and

sense of moral responsibility. Therefore, these multi-forum communities can be viewed as a composite of numerous small brand communities. In addition, due to the activity of multiple brands in one large community, members are more likely to experience oppositional reactions that can be easily observed. Future research of brand communities and oppositional brand loyalty can appropriate members of multi-forum communities as research subjects. In addition, smartphone consumption has been rising in recent years. As smartphone companies seek to build their brand images, they also fuel opposition between users of different brands. Compared to automobiles, consumers use smartphones more often during the day, so these products may better reflect users' personalities. Smartphones also have a shorter life cycle and a lower switching cost. The competition between smartphone brands is even more intense than that between automobile brands. Therefore, smartphones are a rich area for future research of oppositional brand loyalty.

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