

Do Identification and Knowledge Sharing Lead to Loyalty among Lomo's Community Member? The Moderating Effect of Social Interaction

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Abstract: With the burgeoning movement supporting customer empowerment and creativity in today's marketing arena, brand communities are just one of the consumer collectives that were developed in response to this call. This study examines whether members' identification toward the community might lead to loyalty toward the brand. This study empirically tests whether knowledge sharing among members, either co-production or co-consumption – might have similar effects. Further, this study examines whether cross-cultural differences might moderate these effects on members' loyalty toward the brand. Through a survey among 200 Lomography community members from Taiwan and Philippines, three major findings are obtained. First, it is revealed that a strong social identification encourages members to share their knowledge among members and also on brand loyalty. Second, knowledge sharing has positive influence on members' loyalty toward Lomo. Finally, the positive influences of identification on knowledge sharing and brand loyalty is strengthened when they have higher social interaction inside the community. Managerial and academic implications are further discussed in this study.

Keywords: social identity, knowledge sharing, social interaction, brand loyalty, and brand community.

Research Background

An online brand community is a group of brand loyalists who are structurally constructed but geographically unbounded (Muniz and O'Guinn, 2001). Among other things, brand communities enable members to exchange information and knowledge regarding products, which can often help a company to resolve problems when members have difficulties (Bagozzi and Dholakia, 2006; Muniz and Schau, 2005) and can also help them to share ideas with others – *co-consumption* (Brown, Kozinets, and Sherry, 2003; Füller, Jawecki, and Mühlbacher, 2007; Füller, Matzler, and Hoppe, 2008). Another group of studies indicated that knowledge sharing activities engage customers in product innovation through emphasizing *co-production* with customers (Füller et al., 2007; Füller et al., 2008; Prahalad and Ramaswamy, 2004; Sawhney and Prandelli, 2000). Such knowledge sharing activities enrich members' experiences of "transcendence in the context of a consumption event" which may strengthen emotional ties among members and toward brand (Schouten, Prandelli, & Koenig, 2007).

Previous studies have also indicated that members share their knowledge in online brand communities in order to identify with other members (Bagozzi & Dholakia, 2006a, 2006b). Identification toward the brand community enables members to have intrinsic connections with community members (Muniz & O'Guinn, 2001), and at the same time increases oppositional behavior toward those outside the community (Thompson & Sinha, 2008). Although previous brand community studies have developed insights based on social identity theory (Hogg & Abrams, 1988; Tajfel, 1978), very few studies have focused on whether the influence of member identification on knowledge sharing behavior is contingent upon the culture where the community is organized. Based on the idea of Muniz and O'Guinn (2001) that brand communities are unbounded geographically, many studies assume that culture has little influence on member behavior, particularly with regard to

knowledge sharing. Consequently, most of previous studies are conducted in a Western context, which is highly regarded as an individualistic culture (Hofstede, 1980). For example, many studies are conducted using American settings (Bagozzi & Dholakia, 2006a, 2006b; McAlexander, Schouten, & Koenig, 2002; Muniz & O'Guinn, 2001; Schau & Muniz, 2009; Schouten et al., 2007; Thompson & Sinha, 2008) and European settings (Algesheimer, Dholakia, & Hermann, 2005; Cova & Pace, 2006; Füller et al., 2008). Although there is one cross-border study, it compares the communities of Warhammer, France and the USA (Cova, Pace, & Park, 2007).

Last of all, moderating effects of social capital, which focuses on social interaction element, to the relationships between among social identity, knowledge-sharing, and behavioral intentions have been discovered to be a main point of interest particularly because of the potentials found within social networks' ability to provide organizational advantage and harness their stock of shared resources such as knowledge and information which could be accessed through relationships (Hall & Widén-Wulff, 2008; Tymon & Stumpf, 2003). To precisely put it, through ongoing participation and social interactions, members are able to form meaningful, interpersonal relationships within the community (Bagozzi & Dholakia, 2006b), thus building trust on these relationships and increasing their inclination to share knowledge and loyal toward the brand.

Hypotheses Development

According to social identity theory (Hogg & Abrams, 1988; Tajfel, 1978), the cognitive component indicates how an individual categorizes membership in a group (Ellemers et al., 1999). Members voluntarily help other community members who are in the same group. As reported by Muniz and Schau (2005), members voluntarily help others solve and enhance computer functions by sharing information and knowledge due to their intrinsic connection as admirers of the Apple Newton. They also provide feedback to Apple Inc. about how to solve some potential problems. The story is also similar to the report of Brown et al. (2003) in which they indicated that VW Beetle lovers exchange ideas about how to restore the old ones and at the same time provide a great deal of feedback about the new ones.

Evaluative identification enables members to involve emotionally with the community (Ellemers et al., 1999). As reported by Bagozzi and Dholakia (2006a), members of Linux User Groups tend to send feedback and suggestions to express their feelings by posting comments on forum discussions or by providing some feedback to the software developers. Linux users play an important role in the product designing process by discussing new ideas and providing feasible solutions and opinions to firms.

Third, the emotional component states the sense of emotional involvement of a member to a group (affective commitment) (Ellemers et al., 1999). Jeep's members join the *brandfest* in order to build a relationship with other members and to attach themselves to the brand. They share joy, enjoyment, and exciting experiences after they attend the events. Some of them even never miss any events organized by the company (McAlexander et al., 2002; Schouten et al., 2007). Based on that, the following hypothesis is proposed:

H₁: Member identification toward a brand community positively influences knowledge sharing

Davis, Bagozzi, and Warshaw (1989) noted that social influence may indirectly affect individual's behavioral intention through a person's attitude. Community members generate several behavioral outcomes in terms of both social and commercial performance when they view themselves as a part of a community. These outcomes includes group cohesion and unity, members' feeling of ownership of the community, members' loyalty to the community, and organizational citizenship behaviors (OCB) (Organ, 1988). The latter indicates that informal behaviors contributing

to organizations without formal rewards can be viewed as voluntary help-giving behavior (Bateman & Organ, 1983).

Extensive research has revealed that members who are consistent with group norms tend to conduct their behaviors and intentions, such as preference for the brand, member's recommendations (like word-of-mouth promotion of the brand), member participation (such as attending brand events) (Algesheimer et al., 2005), membership continuation, celebration of the brand story (Muniz & O'Guinn, 2001), and loyalty to the brand in the community (Thompson & Sinha, 2008). For example, Harley Davidson riders continue to purchase Harley Davidson motorcycle accessories regularly after they introduce themselves to the community (Schouten & McAlexander, 1995). Therefore,

H₂: Member identification toward a brand community positively influences on their intention to be loyal toward the brand

Knowledge sharing in online communities generates several positive behavioral outcomes for members themselves and provides advantages to firms and community providers. These outcomes can be in terms of both social and commercial performance. For members, feelings of unity and ownership can be created or enhanced within the group (Muniz & O'Guinn, 2001; Bagozzi & Dholakia, 2006b). As illustrated by Algesheimer et al. (2005) community engagement and knowledge sharing behavior can reflect positive and self-instigated aspects of members' perceptions of a brand community, and thus members who intend to share and engage in a group should be eager to repeat behaviors that lead to further increased levels of behavioral intentions. Positive perceptions may exist in the form of intention to continue membership, to maintain regular participation, and to recommend the community to non-members. Knowledge contribution activities can also encourage the beneficial behavioral intentions of community members that are valuable to organizations (Koh & Kim, 2004). For example, Jang, Olfman et al. (2008) found a link between community sharing activities and the level of brand loyalty. Based on this, the following hypothesis is developed:

H₃: Members' identification toward a brand community positively influences loyalty toward the brand

The set of connections and contacts maintained by an individual member or the brand community as a whole unit and the pool of resources embedded within it is referred to as social capital, and as proposed by the Social Capital Theory, it strongly influences the extent to which interpersonal knowledge sharing occurs (Nahapiet & Ghoshal, 1998). Having a similar concept, Tsai and Ghoshal (1998b) also considered social interaction ties as information channels and resource flows.

Analysis on social capital concepts and theories concludes that an individual member's behavior is a result of his social network and relationships (Hsu et al., 2007). In response to this, Lane and Lubatkin (1998) confirm that "through close social interactions, individuals are able to increase the depth, breadth, and efficiency of mutual knowledge exchange." Studies also reveal that the more social interactions that a community member engages in with a fellow member (as exchange partners), the intensity, frequency, and breadth of information exchanged will be greater (Larson, 1992; Ring & Van de Ven, 1994). Still continuing with this notion, Larson (1992) observed that the greater the social interaction a community has with an exchange partner, the more intense the community-related exchange of information is. Social interactive learning thus enables a community to get intimate enough to not just obtain observable or explicit knowledge, but also to go deeper into the tacit components of knowledge (Kogut & Zander, 1996).

Building on the above notion, Cabrera and Cabrera (2005) stated that sharing opportunities are increased when members spend more time with each other because these interactions lead to

shared language and codes and not only because it increases frequent communication. Therefore, increasing structural and cognitive social capital should help to facilitate knowledge sharing. However, Coleman (1994) claimed that it is with relational social capital (specifically in the norm so cooperation fostered within it) that a strong foundation for knowledge creation can be made. He explained that these norms influence social processes by allowing access to individuals for the exchange of knowledge and ensuring the motivation to participate in such an exchange (Putnam, 1997). Finally, in Nahapiet and Ghoshal's (1998) social capital dimensions, it has been recognized that its relational aspect influences members' motivation to share knowledge. Despite having sharing opportunities in existence, a member still may not be willing to participate in knowledge sharing. The motivation to share then will be higher when members trust and identify with each other. In this regard, relational social capital promotes knowledge sharing. Subsequently, increasing structural capital through repeated social interactions could increase both cognitive and relational capital, as repeated interactions increase trust levels.

According to Yli-Renko, Autio, and Sapienza (2001), social interaction not only facilitates knowledge sharing by creating intense repeated interaction, but it also sharpens a community's ability to identify and assess the pertinent external knowledge of the member. Essentially, social interaction offers a better means to and perception of members' operations and more effective ways of communicating with members. Hence, owing to the fact that the ability of each member from an exchange relationship to absorb communicated knowledge is improved through recurring social interaction, both parties now have greater incentive to devote even more in knowledge sharing activities. In the end, social interaction functions as the factor which increases the community's capacity and effectiveness in recognizing and absorbing external knowledge from members by intensifying knowledge sharing activities (Yli-Renko et al., 2001).

As a moderating effect, social interaction relationships affect the access of members to parties for knowledge exchange and combination and also put an influence over value expectation through such an exchange (Nahapiet & Ghoshal, 1998). Empirical evidence has surfaced recently supporting the claim that social interaction relationships influence inter-unit resource exchange and combination (Tsai & Ghoshal, 1998a), knowledge sharing among competitor units vying for greater market shares (Tsai, 2002), and knowledge acquisition (Yli-Renko et al., 2001). In a study on the influence of social interaction on knowledge creation made by Chua (2002), it mentioned that one dimension of social interaction includes a member's sense of identification and oneness (Nahapiet & Ghoshal, 1998) with other members of the group, a dimension which pertains more to the relational aspect. Along this lines, Kramer, Brewer, & Hanna (1996) discovered that when identification occurs, it brings about an increased concern for collective processes and results, thus leading to increased windows of opportunities for knowledge sharing. They concluded that identification, which is strengthened by social interactions, affects value anticipation that will be attained and the motivation to share knowledge. Another dimension of social interaction that corresponds to social identity components would be the cognitive dimension represented by shared language, narratives, interpretations of meaning and symbols within the community, which are said to affect the conditions for the sharing and development of knowledge through enabling the discussion and exchange of information, influencing and shaping members' perceptions, and lastly improving facilities for sharing, transferring, and combining knowledge (Chua, 2002). Essentially, as Davenport and Prusak (1998) summarized it, as communities intermingle within its environments, members absorb information and transform them into knowledge. Lewick and Bunker (1995) also provided evidence regarding the fact that prominent group identification also boosts frequency of cooperation and participation and not only perceived opportunities for interaction.

With regards to the influence of trust, researchers have asserted that trust takes a key part in the emergence of cooperation in such social settings such as communities Kramer et al. (1996). They then related the gains of social interaction (which is being able to know and understand a fellow member) with deepening trusting relationships. He stated that the better a member knows his fellow member and identifies the other as being like him, the more he will be able to predict the actions and responses of that other member. This predictability in turns nurtures trust perceptions, which again would lead back to enhanced inclination to community participation such as in knowledge sharing activities. Hence,

H₄: The positive influence of social identity on (a) knowledge sharing and (b) brand loyalty is strengthened when the level of social interaction among members are high.

Research Method

This study adopted the measurement items that were developed by Bagozzi and Dholakia (2006a, 2006b), Algesheimer et al. (2005), and Ellemers et al. (1999) to measure social identity, in which each dimension has 5 items. The measurement of intention to be loyal toward a brand (three items) were adapted from the work of Algesheimer et al. (2005) and Bagozzi and Dholakia (2006a, 2006b). The measurement items for knowledge sharing toward members – co-consumption - were adapted from Davenport and Prusak (2000) and Ridings, Gefen, and Arinze (2002), and further used by Hsu, Ju, Yen, and Chang (2007). In order to measure co-production, this study adapted two items from Auh, Bell, McLeod, and Shih (2007) and developed an additional two items based on Brown et al. (2003) and Fuller et al. (2007) While four items of social interaction are adapted from the work of Chiu et al. (2006). These research constructs were tested using a 7-point Likert scale, in which “one” refers to strongly disagree, and “seven” to strongly agree.

In order to maximize functional and conceptual equivalence during the translation process, the questionnaire was translated using a double back translation method for a questionnaire targeting Taiwanese respondents. As discussed by Feldman and Lynch (1988), respondents could use retrieved answers to earlier survey questions as inputs to respond to later questions. Thus, in order to reduce the effect of self-generated validity, this study followed the procedure of Podsakoff, MacKenzie, Lee, and Podsakoff (2003) by utilizing counterbalancing question order, with the survey questions not arranged sequentially.

This study purposely selects a brand community that is typified as not belonging to the mainstream and held characteristics of being a tight-knit, active group. Moreover, since previous studies on brand communities were in the context of Western practice and existence, this study aimed to initiate an investigation on an Asian context. Thus, the Lomography communities in the Philippines and Taiwan were selected. Originally hailing from Europe, Lomography, a special-feature analogue camera brand, was adopted by Manila Graphic Designed Lifestyle (GDL) also known as Team Manila, thus adding a new category to its current collection of urban lifestyle-inspired clothing line. Lomography is a creative lifestyle brand, which has a strong reference to photography and has analogue cameras as its core products. It has “Lomographic Embassies” (flagship stores which also act as a base for brand-sponsored activities and gatherings) around the world including countries as Singapore, Australia, France, Taiwan, and a whole lot more. Activities offered to the community members include free seminars and workshops for new Lomography users (which they call “Lomo Therapy”), collaboration events with various college universities featuring photo exhibits and bands (basically a mix of art and music), parties for product launches, collaboration-experiment exhibition series featuring seasoned lomographers, artists, and writers, hang-out sessions with founders of the Lomography society in Manila, etc. They also have their own

regularly updated online website where they keep members posted on the aforementioned events and activities and where members can virtually interact with fellow members and community leaders.

The questionnaire was posted in various official online venues for the Lomography community. This was achieved by asking for permission and help from the moderators of the online website for both countries (again with the permission of a Team Manila officer) if they could post the online survey forms in their website and at the same time mass-send it to its members (because the online platform used for the Philippines' website is like a social networking site which provides users with their own inbox for messages).

The data was collected from February to April 2010. The online questionnaire was posted on six website forums, and an additional follow-up message was sent to individual members' mailboxes after being granted permission from the moderators, administrators, and the webmaster. Website members were grouped by both active members who contributed a lot of time to participating in the communities and to non-active members. The non-active members were excluded from this study. As informed by the webmasters and forum moderators, the researchers obtained community members who were officially registered and frequently participated in forum discussions and then labeled them as active members. There were 2,433 registered members (974 active members) in 2010 when the study was conducted.

A total of 550 respondents visited the site of the online survey, where 200 respondents completed the survey while 146 respondents partially completed the survey and finally, 204 respondents left the questionnaire page blank. As can be seen, 350 questionnaires were rendered unusable and thus were not included for further analyses. In summary, the data collection process yielded a total of 200 usable surveys, with an achieved response rate of 36%.

As the results show, there is a relatively even proportion of female (54.2%) and male (45.8%) respondents. Moreover, the vast majority of respondents are within the 18-25 age bracket (66.4%), followed by those from the 26-35 age group (30.6%). The results also reveal that the sample as a whole seems to be quite well-educated, given that over 64% of the respondents' educational attainment would be that of their Bachelor's Degree, while 35.2% of them hold a post-graduate diploma. According to the distribution based on occupation, most serve as employees (43.2%) or are students (36.2%). A mere 20.6% of the sample is self-employed. Majority of the respondents have 1-3 years of experience (41.9%), followed by those with less than a year of experience (30.2%). As for respondents having 3-6 years or more than 6 years of photographic experience, they only make up a small proportion of the sample at 16.3% and 11.3%, respectively. Specific to Lomography, 45.5% of the respondents have less than a year's worth of experience while 41.2% of them have 1-3 years of experience on them. Those having 3-6 years or more than 6 years of Lomography membership make up a small proportion of the sample size, at 11% and 2%, respectively. Again, this is due to the fact that Lomography has only been introduced in the Philippines recently and is quickly turning into an underground sensation among the youth. Given the same rationale, 53.2% of respondents have only been members of this community for less than a year while 40.2% have been members for 1-3 years now. In terms of respondents' frequency of participation in the community's outdoor activities, 37.2% of them have attended 1-3 times. As for their participation in the community's online activities, 41.9% of them have been active for 1-3 times while 24.8% have been active for more than 6 times for the last 6 months.

Analysis

The construct validity was assessed using the guidelines in Anderson and Gerbing (1988). First, an exploratory factor analysis was conducted to ensure that all the items resulted in factor

solutions, as expected theoretically. The Cronbach's α for each coefficient was greater than 0.70. Second, Confirmatory Factor Analyses (CFA) was used to assess the convergent validity of the measures. Most of item loadings exceeded .60, and each indicator t -value exceeded 10 ($p < .001$), thus satisfying the CFA criteria (Hair, Black, Babin, & Anderson, 2010). The overall fit supported the measurement model, and the χ^2 fit statistic was 732.98 with 248 degrees of freedom. The root mean error (RMR) was .08, and the goodness of fit index (GFI) was 0.88. All these figures supported the overall measurement quality given a particular sample and number of indicators (Gerbing & Anderson, 1992), and the measures thus demonstrated adequate construct validity and reliability. To assess the potential impact of the common method bias in the present study, the discriminant validity was tested. A Harman one-factor test was conducted (Podsakoff & Organ, 1986) that loaded all the variables into a principal component factor analysis. The results revealed that no single factor dominated (six factors were generated with 73.71% of the total variance, and factor 1 accounted for only 19.85% of the variance). Therefore, discriminant validity among the research constructs was further confirmed.

To test the research hypotheses, this study used structural equation modeling (SEM) with the maximum likelihood estimation method and second-order factors. Given the measurement validity of the overall research variables, this technique could reduce model complexity and could be used for structural model analysis and hypotheses testing (Anderson & Gerbing, 1988). The model had $\chi^2 = 49.22$ with 24 degrees of freedom, and the GFI (RMR) = 0.90 (0.10), which suggested that the model fit the data (Figure 1).

Figure 1 is about here

Hypothesis 1 posits that member identification has a positive effect on knowledge sharing, while Hypothesis 2 predicts that member identification has a positive influence on brand loyalty. The path analysis results indicated that there were significant positive influences from member identification on members' knowledge sharing ($\beta=0.587$, $p<0.001$) and brand loyalty ($\beta=0.339$, $p<0.01$). Thus, H_1 and H_2 were supported. Hypothesis 3 posits that members' knowledge sharing positively influences their brand loyalty. The result indicated that there was a significant and positive influence of knowledge sharing members on their behavioral intentions ($\beta=0.423$, $p<0.001$), which thus supported H_3 .

In order to test the moderating effects, this study initially developed an unconstrained (baseline) model (Table 1). The second model was the relevant path divided into two groups, high and low cultural differences by using mean values as the cut-point. The difference in χ^2 values between the two models provided a test for the equality of the path for the two groups (Jöreskog & Sörbom, 1999). Moreover, this study tested the critical difference of the relevant path from the t -values. As shown in Table 2, the baseline model generated $\chi^2(24)=43.47$, while the constrained model for different levels of social interaction had $\chi^2(48)=73.18$. Hypothesis 4 posits that the positive effects of member identification on knowledge sharing and brand loyalty are strengthened when the members have a higher social interaction. The results indicated that there was a significant difference ($t=2.280$, $p=0.04$) for the positive effect of member identification on knowledge sharing under high ($\beta_{HSI}=0.609$, $p<0.01$) and low social interaction ($\beta_{LSI}=0.094$, $p<0.05$). As expected, there was a significant difference for the paths of member identification and brand loyalty ($t=2.493$, $p=0.02$), in which the coefficient for social interaction is lower ($\beta_{LSI}=0.223$, $p>0.05$) than that of high social interaction ($\beta_{HSI}=0.987$, $p<0.01$).

Discussion

Based on the results shown, several conclusions can be made regarding the relationships among the constructs used for this study's proposed model. Firstly, the findings signify that customer participation in collective activities, specifically for the purpose of knowledge sharing and behavioral intentions within brand communities can be explained by both social and psychological variables as hypothesized. Bagozzi and Dholakia's (2006a) study shows similar results, where they found out that social identity was a crucial determinant of group behavior. It just goes to show that when community members strongly feel attuned with the group, the more they are willing to extend themselves by way of sharing knowledge and patronizing the brand/company. The results also concordance with Ashforth and Mael's (1989) study which claimed that members are more disposed to opt for activities that match with relevant aspects of their identities and are inclined to support the organizations that exemplifies those identities. It also indicated that a strong social identity can provide a motivational orientation to community members, which is consistent with the argument of Nahapiet and Ghoshal (1998) that identification acts as a resource which influence community members' motivation to combine and exchange knowledge, help and cooperate with others (Chatman & Flynn, 2001), and adds to members' eagerness to remain active within the community (Bergami & Bagozzi, 2000; Bhattacharya & Sen, 2003; Dholakia et al., 2004; Meyer et al., 2002).

Second, community members' knowledge sharing behaviors have a positive influence on their brand loyalty. This conclusion runs in parallel to various prior studies made, one of which is from Koh and Kim (2004), who substantiated this direct, positive relationship. The results of their study showed that knowledge sharing predicted community participation and recommendation, whereby they also interpreted the act of knowledge posting on forums and discussion board to be a display of positive perceptions of community membership and loyalty. Another finding was that loyalty was one significant outcome of knowledge sharing activity.

Third, the relationship between social identity and knowledge sharing is strengthened when the level of members' social interaction is high. A study conducted by Chiu et al. (2006) also shows that social interaction ties increased identification which consequently increased individual's quantity of knowledge sharing. Similarly, greater social interaction also generate stroger relationship between social identity and brand loyalty, due to their identification is faclitated by social mechanism as part of a brand community. The results are consistent with the argument of Tsai and Ghoshal (1998b) that high frequencies and opportunities for social interaction increase on how members will participate in the community as their behavior will primarily be dictated by their own perceptions of which activities they can see themselves doing as well as with other members who they feel connected to.

This study has implications for practitioners as well as academics. This study found that strong brand community identification can lead members to favorable behavior such as community recommendation and brand loyalty. Thus, through adequately selecting, initiating, managing, and controlling interactions among customers (Algesheimer et al., 2005), managers can succeed in facilitating community in its attempts to establish brand loyalty. Furthermore, in the case of active and loyal members, particularly core members who are frequently quoted and referenced by other community members (Kozinets, 1997), managers should encourage and give them rewards, emotionally or socially, so that they will have more commitment and passion.

In addition to these managerial implications, this study has several theoretical ones. First, although brand community is proposed to be geographically unbounded (Muniz & O'Guinn, 2001), this study indicates that social capital (in this case social interaction) at the community level is matters. Therefore, this study contributes to the brand community literatures (Bagozzi & Dholakia, 2006a, 2006b; Füller et al., 2007, 2008) in which it is indicated that prominent group identification

also boosts frequency of cooperation and participation and not only perceived opportunities for interaction (Davenport and Prusak, 1998; Lewick and Bunker, 1995). Second, this study contributes to social identity theory (Hogg & Abrams, 1988; Tajfel, 1978) which posits that social interaction matter with regard to explanations of the consequences of member identification.

Although the research results were compelling, several limitations existed in this study that suggests areas for further research. First, in Chiu et al.'s (2006) study on knowledge sharing in virtual communities, they had only considered active participants in their research sample and suggested that generalizability of results might pose as a concern. In the same vein, the findings of this study may have been subjected to self-selection bias, as a sizeable majority of respondents are only comprised of active community members/participants as shown in the descriptive characteristics above. Additional research may be required for those nonparticipants or to disaffected participants, as it is uncertain if the results can be generalized to include them. Second, it cannot be made certain if the respondents of this study are community participants who actively share knowledge or are those who participate for the purpose of receiving knowledge but do not share or contribute. As have already been established and argued by Storck and Hill (2000) that knowledge sharing is crucial in motivating community membership and sustaining communities, future research could investigate other factors that members consider in choosing to participate in a brand community. Finally, this study selected brand communities from the Philippines and Taiwan to examine the effect of cultural differences (Sukoco, Loh, and Wu, 2011). By using a multi-country observation, future studies could extend the generalizability of the results.

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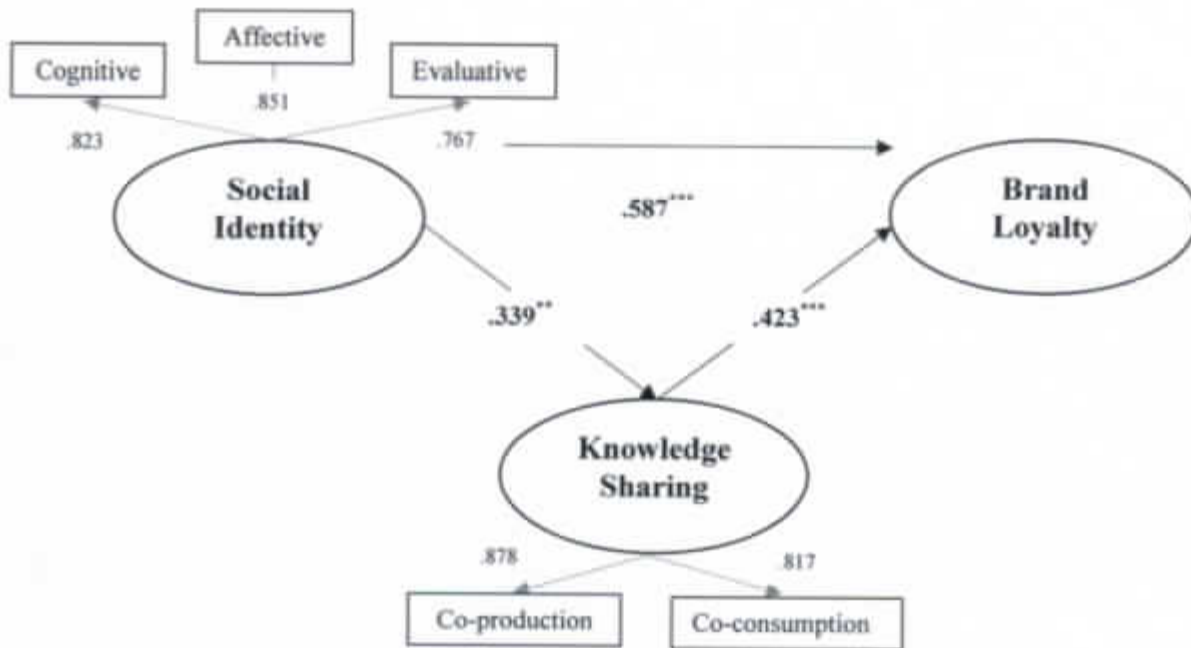
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Figure 1 – The Proposed Model



Note: χ^2 (df) = 40.22 (30), CFI (RMSEA) = .97 (.07), GFI = .90 (.10), p = .10; * refers to p<.10, * refers to p<.05, ** refers to p<.01, *** refers to p<.001

Table 1. Moderating Effect of Social Interaction

Paths	High Social Interaction	Low Social Interaction
Baseline (unconstrained) model: $\chi^2(24) = 43.47, p = .12$		
Constrained model: $\chi^2(48) = 73.18, p = .16$		
Social Identity → Knowledge Sharing	$\gamma_{(HSI)} = .609^{**}$ $t = 2.280, p = .04$	$\gamma_{(LSI)} = .094^*$
Social Identity → Brand Loyalty	$\gamma_{(HSI)} = .987^{**}$	$\gamma_{(LSI)} = .223$ $t = 2.493, p = .02$

Note: * refers to $p < .05$, ** refers to $p < .01$