Full Length Article

Brand followers' retweeting behavior on Twitter: How brand relationships influence brand electronic word-of-mouth

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ABSTRACT

Twitter, the popular microblogging site, has received increasing attention as a unique communication tool that facilitates electronic word-of-mouth (eWOM). To gain greater insight into this potential, this study investigates how consumers' relationships with brands influence their engagement in retweeting brand messages on Twitter. Data from a survey of 315 Korean consumers who currently follow brands on Twitter show that those who retweet brand messages outscore those who do not on brand identification, brand trust, community commitment, community membership intention, Twitter usage frequency, and total number of postings.

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1. Introduction

The phenomenal growth of social media has redefined the digital media landscape by changing how information in a networked environment is received and disseminated. Among a variety of social media platforms, Twitter, the popular microblogging platform, has received a great deal of attention for its capacity to broadly propagate information to a large audience. Users can post information via "tweets" from any place and broadcast these updates immediately to anyone "connected" ("followers") in their social network. They can also forward to their followers in real time a message received by another Twitter user, a maneuver known as "retweeting."

As this new information-sharing paradigm unfolds, marketers have increasingly recognized its potential to foster consumers' "sharing" of information or opinions about brands. This of course directly influences brand electronic word-of-mouth (eWOM). In recent years, Twitter has launched *Promoted Tweet*, tweets purchased by advertisers, which can be retweeted, replied to, and "favorited" like regular tweets (Twitter.com Help Center). Another venue on Twitter for facilitating brand eWOM is brand pages. After becoming followers of brand pages, consumers can read the broadcasted brand tweets in their own accounts as they are automatically aggregated into a single list (Jansen, Zhang, Sobel, &

Chowdhury, 2009). Retweeting brand posts to their followers makes it possible to exchange information about brands more quickly and easily. With 86 percent of companies active on Twitter (Bennett, 2012), marketers understand Twitter to be an effective eWOM tool that can directly influence target consumers, as well as other members of the consumer network.

The key to success of brand eWOM communication depends, to a large extent, on understanding factors that predict consumers' action to influence others' attitudes and behaviors, as well as information seeking for opinion seekers (Flynn, Goldsmith, & Eastman, 1996). Consumers who opt into interactions with brands and observe consumer-brand conversations on Twitter are known as "brand followers." Brand followers are more likely to actively engage in eWOM, especially when they are highly loyal and satisfied with the brand (Chung and Darke, 2006). Accordingly, we attempt to investigate consumer engagement in brand eWOM activities on Twitter in terms of relationships the consumers have with brands.

Building on prior research in the areas of consumer-brand relationships, online brand community, and eWOM literature, we identify key predicting variables that may lead brand followers to engage in *brand retweets* on Twitter. We do so by comparing how such variables differ among those who retweet brand messages ("brand retweeters") and who do not ("brand non-retweeters"). Specifically, this study examines whether brand-retweeting behavior is influenced by variables concerning brand relationships (i.e., brand identification, brand trust, community commitment, and community membership intention) and is associated with

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Twitter usage frequency and number of postings. This present study has three primary objectives: (1) understand the nature of retweeting behavior in social media, (2) identify factors that facilitate—or function to stimulate—brand followers' retweeting behavior on Twitter, as well as the relative importance of these factors, and (3) better inform both researchers and practitioners on how they can improve the ways they encourage brand followers to spread a brand's message among Twitter users.

In this study, the authors surveyed a sample of Korean consumers who follow brands on Twitter. In South Korea, according to a study by Burson-Marsteller (2011), social media plays a powerful role in corporate communication and marketing, with 90 percent of companies using microblogs. A recent study by KPR Social Communication Research Lab (eMarketer, 2013) revealed that, in South Korea, Twitter is one of the leading social media platforms used by companies and public institutions. The findings of the study delve into the effects of consumer-brand relationship variables on eWOM in the up-and-coming social media environments. Finally, the findings shed light on the role of Twitter as an effective tool in developing close brand connections with consumers and eventually creating brand loyalty.

1.1. eWOM in social networking sites

We can define word-of-mouth (WOM) as consumers' interpersonal communication about products and services, and it is a commonplace that WOM plays a major role in influencing consumer attitudes and behaviors (Richins, 1984). WOM also takes place within a variety of online environments (known as eWOM), allowing information exchanges to be immediately available to a multitude of people and institutions (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Unlike conventional interpersonal communication, where the credibility of opinion providers is considered critical, eWOM facilitates information sharing with no face-to-face interaction (Sun, Youn, Wu, & Kuntaraporn, 2006).

Among other online platforms, communities in social networking sites (SNSs) have received much attention in recent years for their ability to accelerate eWOM for brands. SNSs serve as a powerful, ideal venue for eWOM, a venue where consumers disseminate and seek out information from their established social networks (mostly labeled as "friends") through interpersonal interactions online (boyd and Ellison, 2007; Vollmer and Precourt, 2008). Product or brand-related information and opinions that are shared among personal contacts in SNSs may be perceived as more credible and trustworthy than other forms of eWOM communication (Chu and Kim, 2011).

In addition, individuals' voluntary exposure to brand information on SNSs exposes them to brand eWOM activities, possibly enhancing the eWOM's effectiveness. For example, consumers voluntarily engage in brand eWOM by becoming a friend or fan or clicking on the "like" or "share" buttons on Facebook. Such online eWOM can be driven by consumers' motivations to give a company "something in return" for a positive experience, as well as maintain and support the continued success of the company (Hennig-Thurau et al., 2004). Such behaviors occurring on SNSs are considered customer investments in response to marketers' social media efforts (Hoffman and Fodor, 2010).

Prior eWOM literature has conceptualized eWOM communication as comprising three key dimensions (e.g., Chu and Choi, 2011; Chu and Kim, 2011; Sun et al., 2006). *Opinion leadership* is the process by which individuals share information and influence others' attitudes and behaviors. *Opinion seeking* is whereby individuals search for information and advice from others when making a decision (Flynn et al., 1996). *Opinion passing* is the process of pass-along behavior (e.g., email pass-along) (Huang, Lin, & Lin, 2009; Norman and Russell, 2006; Phelps, Lewis, Mobilio, Perry, &

Raman, 2004; Sun et al., 2006). On SNSs, users play a role as opinion leaders by posting messages and opinions on their accounts, updating their profiles or status, or commenting on pages/photos. They also become opinion seekers when they use such information provided by others. People seeking out information (traditionally called opinion seekers) are also likely to disseminate it, blurring the two roles (Sun et al., 2006). Online-passing behavior is more likely to occur in SNS contexts (Chu and Kim, 2011), where people aver their opinions and forward those of others with great ease. For example, consumers easily forward information about products or brand performance and pass along marketing messages by just clicking the "like" button on Facebook brand pages or by simply hitting the "retweet" button on Twitter. Online brand communities consist of a relatively small number of people who share common interests in a product or brand. In contrast, eWOM occurring within SNSs can convey brand messages to millions of SNS users. Given the potential to retain existing customers and attract new consumers on a global scale, opinion-passing behavior is regarded as an enhanced dimension of eWOM in SNSs (Chu and Kim, 2011). Such a dimension, however, has yet to be fully explored in various SNS contexts.

1.2. Retweeting: A unique form of eWOM on Twitter

Twitter enables companies to engage in interpersonal communication with their consumers on a one-to-one basis. Recent studies have found that companies frequently utilize interpersonal messages in their Twitter posts to develop close relationships with their consumers (e.g., Kwon and Sung, 2011; Lin and Peña, 2011). Relatedly, consumers generate company- or brand-related tweets on Twitter to express their sentiments, complaints, and opinions concerning brands (Jansen et al., 2009). Thus, Twitter is used as a social channel to promote communication and to help companies develop mutually beneficial relationships with consumers (Edman, 2010; Jansen et al., 2009).

As Twitter users directly receive messages from those in their personal connections, the impact of eWOM is considered similar to that of traditional WOM (Hennig-Thurau, Wiertz, & Feldhaus, 2012). In addition, Twitter has been found to offer relational benefits by allowing users to build perceptions of one another and establish common ground for future conversations, and by promoting a feeling of connectedness with one another (Zhao and Rosson, 2009), thus, enhancing the power of eWOM. Combined with its ability to diffuse information in real time, Twitter allows the spread of information more rapidly than any other type of WOM communication (so-called "microblogging WOM"; Hennig-Thurau et al., 2012).

Given the implications for WOM, a number of social network researchers have empirically studied the process by which users disseminate and share information via Twitter (e.g., Cha, Haddadi, Benevenuto, & Gummadi, 2010; Kwak, Lee, Park, & Moon, 2010; Suh et al., 2010; Ye and Wu, 2010; Zhang, Jansen, & Chowdhury, 2011). In light of the diffusion process, researchers have tended to highlight the role of individuals ("influential") who are capable of influencing a vast number of audiences in the network (e.g., Bakshy, Hofman, Mason, & Watts et al., 2011). The concept of influence within Twitter is understood in terms of interpersonal activities that individuals engage in and that also lead others to become engaged in (Cha et al., 2010).

One form of information diffusion in Twitter that has become widespread is *retweeting*. Retweeting may occur nearly instantly after an original tweet (Kwak et al., 2010). Popular tweets can even propagate multiple hops away from the original source (Cha et al., 2010). When messages are repeated frequently and spread widely to a large number of recipients, they generally take on greater influence (Kwak et al., 2010; Phelps et al., 2004; Suh et al., 2010).

Retweets can be more powerful in reinforcing a message because they are repeated among groups of users who are strongly connected (Cha et al., 2010; Hung and Li, 2007).

A unique mechanism for information diffusion, retweeting is bolstered by its interpersonal value. The mechanism of retweeting is similar to that of message pass-along behavior in traditional online contexts (e.g., email forwarding, online video sharing, etc.): users copy others' tweets and pass them on to other Twitter users. Like email-forwarding behavior (Huang et al., 2009), retweeting is characterized as a one-to-one communication tool, which can improve the interpersonal aspect of eWOM activities. In choosing what to retweet, Twitter users often concern themselves about the audience to whom they intend to retweet (boyd, Golder, & Lotan, 2010). Furthermore, retweeting enables users to add more value to the information by allowing them to add commentary or modify the original message (Suh et al., 2010). In this sense, Twitter users may use retweets as part of a conversation as a communication medium for validating and engaging with others (boyd et al., 2010).

2. Conceptual rationale and hypotheses

A fair amount of brand community and eWOM literature often regards brand relationships to be outcome variables (e.g., Muniz and O'Guinn, 2001; Zhou et al., 2012). While it is true that consumer activities within such communities, including eWOM, may enhance the consumer's relationships with brands, it could also be true that the extent to which a consumer relates to a brand influences his or her attitude and behavior (Aggarwal, 2004). Along the same lines, strong consumer-brand relationships could influence a consumer's decision to spread brand messages to others (McAlexander, Schouten, & Koenig, 2002; Yeh and Choi, 2011). In the sections that follow, this paper discusses each of the proposed brand relationship variables.

2.1. Brand Identification

The idea of brand identification suggests that community members identified with a brand tend to engage in pro-brand activities through their affiliation with the community and interactions with peer members (e.g., Algesheimer, Dholakia, & Herrman, 2005; Bagozzi and Dholakia, 2006; Carlson, Suter, & Brown, 2008; Muniz and O'Guinn, 2001). Bagozzi and Dholakia (2006) defined brand identification as "the extent to which the consumer sees his or her own self-image as overlapping with the brand's image" (p. 49). This can be used to construct the self, as a reference point for distinguishing oneself from non-brand users, as well as to present the concept of self to others (Escalas and Bettman, 2005).

According to identity theory (Stryker, 1968), the self consists of multiple aspects and is defined by the shared meanings of its social interactions. It is believed that the structure of self influences individual behavior in social interactions. In SNS environments where consumers display themselves publicly to others, a consumer engaging in eWOM shapes and expresses his or her self and identity (Taylor, Strutton, & Thompson, 2012). eWOM on Twitter can serve as a means of self-expression when a consumer perceives a certain tweet as supporting his or her self-concept. In this sense, the extent to which a consumer is associated with a brand would determine his or her "contribution" to brand-related content on Twitter (Muntinga, Moorman, & Smit 2011). Therefore, it is postulated:

H1. Brand retweeters will show higher brand identification than will brand non-retweeters.

2.2. Brand trust

Another significant predictor of people's willingness to exchange information with one another is trust (Ridings, Gefen, & Arinze, 2002). In a trusting environment, people are inclined to help others and share collective activities (Jarvenpaa, Knoll, & Leidner, 1998); they are eager to exchange information. Trust in (online) community members should motivate the sharing of information (Ridings et al., 2002).

Consistent with the source credibility theory (Birnbaum and Stegner, 1979), previous studies on eWOM communication have indicated that people are more likely to pass along information when the source of it is perceived as trustworthy (e.g., Brown, Broderick, & Lee, 2007; Chiu et al., 2007; Phelps et al., 2004; Yeh and Choi, 2011). Information received from interpersonal sources then should exert a strong influence on the recipient's pass-along behavior. Likewise, tweets broadcast by brands in Twitter would be perceived as having more pass-along value than commercial messages and thus, have a greater likelihood of being retweeted by Twitter users.

Not only might the source credibility account for consumers' general perceptions of brand tweets, but also for their retweeting behavior. A brand's credibility is influenced by how consumers perceive its intentions (Allsop, Bassett, & Hoskins, 2007; Delgado-Ballester & Munuera-Alemán, 2001). Hence, a consumer's level of trust in a brand may determine whether she engages in brand eWOM activities. Thus, we predict that brand retweeters will have a higher level of brand trust than brand non-retweeters.

H2. Brand retweeters will show a higher brand trust than will brand non-retweeters.

2.3. Community commitment

The concept of brand community (Muniz & O'Guinn, 2001) is generally defined by its social interactions. Brand admirers acknowledge their membership and engage in social relations with others (Carlson et al., 2008). The psychological bond or affective commitment of a member to the community may be called his or her brand community commitment (Ellemers, Kortekaas, & Ouwerkerk, 1999). Commitment to the brand community involves kinship between members (McAlexander et al., 2002). After all, membership is based on shared brand experiences as well as an appreciation for the brand's utility and value, and a sense of belonging (Carroll and Ahuvia, 2006).

Consumers motivated by a sense of commitment tend to exhibit behaviors that are consistent with the community norm such as brand WOM activities (McAlexander et al., 2002; Muniz & O'Guinn, 2001). Research has shown that a sense of obligation or commitment to a certain community influences the likelihood of passing along information to others (Walsh, Gwinner, & Swanson, 2004). Although brand followers on Twitter may not perceive a brand page the same as would a traditional online brand community, they would still share a sense of community with the brand and other brand admirers within an "imagined community" comprised of sets of interlinked "personal communities" (Gruzd, Wellman, & Takhteyev, 2011). Consequently, they are more motivated to take part in eWOM communication.

Because individuals who feel a strong sense of commitment to an electronic network consider it a duty to contribute knowledge (Wasko and Faraj, 2005), the level of brand followers' commitment to a brand page is expected to determine retweeting behavior on Twitter. Therefore, we propose that:

H3. Brand retweeters will show higher on community commitment than will brand non-retweeters.

2.4. Community membership intention

Community membership intention implies willingness to maintain the membership and stay committed to the community (Algesheimer et al., 2005). A consumer's intention to remain engaged with a brand community depends, to some extent, on his satisfaction with his relationship to the brand (Zeithaml, Berry, & Parasuraman, 1996).

Similarly, eWOM, an important aspect of a consumer expression of brand satisfaction (Jansen et al., 2009), can be motivated by a consumer's desire to support the brand (Hennig-Thurau et al., 2004). This is drawn from a general altruistic motive to patronize a company or brand, following consumers' positive experiences with the employees and their responses to problems (Sundaram, Mitra, & Webster, 1998). If brand followers consider worthy of support a brand and its activities on Twitter (e.g., monitoring, responding to posts, managing the brand page), they are likely to remain in the community and make intentional efforts to engage in eWOM communication. Following this logic, we expect brand retweeters to show stronger intentions than those of brand non-retweeters to maintain community membership.

H4. Brand retweeters will show higher community membership intention than will brand non-retweeters.

2.5. Twitter usage frequency and postings

As noted earlier, a number of recent studies have utilized social network methods to explore eWOM communication on Twitter. With few exceptions (e.g., Kwak et al., 2010), findings seem to indicate that more activities on Twitter (e.g., followers, replies, retweets, etc.) lead to a greater influence members exerted on eWOM communication. The uses and gratification approach (Rubin, 2009) suggests people use media to gratify their needs. Based on this approach, we explore the influence of Twitter use in terms of (1) frequency of media usage (i.e., log-in frequency) and (2) the amount of information (i.e., tweets) produced by the user (i.e., the total number of postings on Twitter).

Chen's study (2011) provided support for the notion that Twitter usage frequency and number of tweets gratify active users' needs to connect to others. Likewise, this impact may hold true for the act of retweeting brand messages to others. Because brand information can, on Twitter, be an important source of information during interactions with other peer consumers, retweeting serves as a means of interpersonal communication (boyd et al., 2010). Once individuals become followers of brands on Twitter, they receive bits of information on their own Twitter page. Those with higher levels of Twitter usage are more likely to retweet these to their followers. We hypothesize then that brand retweeters and brand non-retweeters differ in their level of Twitter usage.

H5. Brand retweeters will show higher Twitter usage frequency than will brand non-retweeters.

H6. Brand retweeters will show a greater number of postings than will brand non-retweeters.

RQ: Which of the aforementioned factors (brand identification, brand trust, community commitment, community membership intention, Twitter usage frequency, number of postings) can best predict eWOM behavior on Twitter?

3. Method

3.1. Sample and procedure

With support from SCOTOSS Consulting, a management consulting firm in Korea, an online survey was conducted on a sample of Korean consumers who were at the time following commercial brands on Twitter. Because South Korea has a high percentage of companies using social media (Burson-Marsteller, 2011; eMarketer, 2013), the authors felt assured they could gather a sample of subjects that had, on Twitter, engaged in eWOM communication. Since the use of SNSs was found to be highest among young adults aged 20–39 (about 86 percent; SCOTOSS Consulting, 2011), this was the survey's target population. Invited to participate in the study were a total of 315 Twitter users who were following at least one of the top 10 most-followed brands on Twitter in South Korea (based on the number of followers as of February, 2012; Samsung Electronics, Korean Air, Domino Pizza, Hyundai Motor, Korea Telecom, SK Telecom, LG Electronics, LG UPlus, Mr. Pizza, and Asiana Airlines). For the purpose of the study, this procedure was undertaken to ensure all respondents were followers of brand pages that had well-established activities on Twitter. A sample of respondents was recruited from an online panel operated by Research & Research, a survey research company in South Korea.

Participants were asked a series of questions about their Twitter usage and to indicate the degree to which they agreed with some given statements assessing their relationships with brands. As for the question regarding brand (non) retweets, they were asked if they had ever retweeted brand messages to others on Twitter. As an incentive, all respondents who completed the survey were entered into a prize drawing to win one of twenty gift vouchers worth US $10.

The respondents consisted of 156 males (50 percent) and 159 females (50 percent) ranging in age from 20 to 38 (age $M = 31$, $SD = 4.53$). A broad array of occupations was represented: 53 percent clerks, 15 percent professionals (such as doctors, lawyers, artists, and businessmen), 7 percent salesmen and service workers, 6 percent housewives, and 6 percent others. Most participants (approximately 83 percent) held a bachelor's degree at least.

3.2. Measures

Each of the brand relationship measure items was formatted into a 7-point ("strongly agree–strongly disagree") Likert-type response scale. To measure the extent to which respondents reported their identification with the brands they followed on Twitter, that is, *brand identification*, three scale items from Algesheimer et al. (2005) were used ($M = 4.31$, $SD = 1.20$). Four items from Hon and Grunig (1999) and a self-created item were used to measure *brand trust* ($M = 4.48$, $SD = 1.04$). *Community Commitment* was assessed with Sung, Kim, Kwon, & Moon (2010), using two measures ($M = 4.32$, $SD = 1.22$). Further, the extent to which respondents intended to maintain their membership on the brand page on Twitter, *community membership intention*, was measured using two scale items from Sung et al. (2010) and one item from Algesheimer et al. (2005) was used ($M = 4.82$, $SD = 1.03$).

Twitter usage variables were operationalized by asking respondents to estimate (1) how often, on a seven-point Likert-type scale ("rarely–several times a day"), they logged on to their Twitter account and (2) how many tweets they had posted on their account in the last 12 months. In addition to these measures,

respondents' general motives for using and their actual use of Twitter were assessed for descriptive purposes.

4. Results

4.1. Sample characteristics

Prior to testing the proposed hypotheses, descriptive statistics were run to examine the general use of Twitter among the brand follower participants. Respondents had used Twitter, on average, for about 11 months. With an average of 24 min of Twitter usage per day, 86 percent of the respondents were regular Twitter users (daily users: 24 percent and weekly users: 62 percent). To log on to Twitter, respondents most frequently used a smartphone (68 percent), a computer next (28 percent), and then a tablet device (3 percent).

With an average of 54 followers (number of people or accounts a respondent follows on Twitter) and 61 followings (number of people or accounts who opt to receive the tweets of a respondent), the participants had posted an average of 105 tweets on their account in last 12 months. Twenty-four percent of the respondents had posted tweets at least once a day, with 40 percent had done so on a weekly basis.

As for their reasons for following brands on Twitter, brand follower participants indicated the following: "to be the first to know information about the brands" (75 percent), "because they currently use the brands" (70 percent), "to get information more quickly" (67 percent), and "because they can use it anytime, anywhere" (65 percent; percent of ratings above 5 on a 7-point, Likert-type scale).

A majority of respondents had tweeted about brands (82 percent), and nearly two-thirds (63 percent) reported they included brands in their tweets more often than "sometimes." Of those who had had retweeted brand tweets to others (181 participants, 58 percent), 21 percent were regular brand retweeters who retweeted at least once a week.

4.2. Brand relationships and brand retweet

H1–H4 predicted that brand retweeters would score higher than their non-retweeting counterparts on brand identification, brand trust, community commitment, and community membership intention. To test these hypotheses, the authors conducted an independent-samples t-test to see the difference in brand relationships between brand retweeters and brand non-retweeters. The results indicated that brand retweeters revealed significantly higher scores than brand non-retweeters on brand identification ($t = 5.96$, $p < 0.001$), brand trust ($t = 3.97$, $p < 0.001$), community commitment ($t = 5.83$, $p < 0.001$), and community membership intention ($t = 3.87$, $p < 0.001$); therefore, the proposed hypotheses were supported (see Table 1 for means, standard deviations, and Cronbach alphas).

4.3. Twitter usage and brand retweet

Additionally, the authors expected brand retweeters to score higher on Twitter usage frequency and number of postings than brand non-retweeters. Using an independent-samples t-test, H5 and H6 were supported for both Twitter usage frequency ($t = 3.91$, $p < 0.001$) and number of postings ($t = 3.30$, $p < 0.005$; see Table 1). In other words, brand followers who retweeted brand messages had logged in to Twitter more frequently and left more postings in the prior 12 months than had those who did not retweet.

4.4. Best predictors of brand retweet

Discriminant analysis was employed to determine which variables—brand identification, brand trust, community membership intention, community commitment, Twitter usage frequency, and the total number of postings—could best discriminate between brand retweeters and brand non-retweeters in the context of Twitter.

As a result of the discriminant analysis, one function was generated and was significant (Wilk's lambda = 0.840, $\chi^2(6) = 53.96$, $p < 0.001$), indicating that the function of predictors significantly differentiated between the groups of brand retweeters versus non-retweeters. Brand retweet versus non-retweet was found to account for 16 percent of function variance. Correlation coefficients (see Table 2) revealed that brand identification (0.785) was most associated with the function, thereby, best predicting when a consumer engages in brand eWOM on Twitter. This was followed by community commitment (0.755), Twitter usage frequency (0.527), brand trust (0.514), community membership intention (0.507), and the total number of postings (0.381). Hair et al. (1998) suggested that loadings with a value of at least 0.30 can be considered "substantial" (p. 294).

Original classification results revealed that brand retweeters were classified with 80.7 percent accuracy while brand non-retweeters were classified with 48.5 percent accuracy. For the overall sample, the results yielded a classification accuracy of 67 percent. Cross-validation derived 66.3 percent accuracy for the total sample. Group means for the function indicated that those who retweeted brand messages to their followers had a function mean of 0.374 and those who did not retweet had a mean of −0.505. In sum, these results further confirm the results of our independent-samples t-tests.

5. Discussion

Twitter has opened a new arena for eWOM communication, especially, with regard to its ability to "spread the words of brands" among users within the network and further reach out to a wide variety of potential consumers. Twitter exists as a unique tool that can facilitate brand eWOM among consumers; that is, via "retweets." The purpose of this study was to investigate how consumers' relationships with brands influence their engagement in brand-retweeting behavior. To enhance our practical knowledge of brand-retweeting behavior, this study was based on a sample of brand followers some of whom had and others who had not actually engaged in brand retweets.

Our findings reveal that brand followers who have close relationships with brands are more likely to retweet brand tweets to their followers than are their counterparts. Specifically, the findings demonstrate that the extent to which followers of brands identify themselves with the brands contributes the most to their retweeting behavior. Further, the results provide evidence that brand followers' commitment to brand pages on Twitter is another significant predictor of retweeting messages produced by brands.

Our findings also suggest that a higher level of brand trust is associated with consumers who retweet brand tweets to others on Twitter than with those who do not. The same relationship pattern is also found between consumers' intentions to continue a relationship with brands and their retweeting behavior. These findings highlight the role of Twitter as a relationship management tool to help companies communicate with their consumers and further cultivate relationships (Edman, 2010). From a public relations perspectives, trust and commitment are the key components of developing the successful interpersonal relationships that companies strive to achieve (Hon and Grunig, 1999). To gain trust

Table 1
Mean, standard deviations, and cronbach's alpha for independent variables.

Variable	Mean[1]		
	Retweet (*n* = 181)	Non-retweet. (*n* = 134)	α
Brand identification	4.64 (1.08)	3.86 (1.21)[*]	0.83
Brand(s) says a lot about the kind of person I am			
The image of brand(s) and my self-image are similar in many respects			
The brand(s) plays an important role in my life			
Brand trust	4.67 (1.02)	4.21 (1.02)[*]	0.89
The brand(s) treats consumers fairly and justly			
I believe the brand(s) takes the opinions of consumers into account when making decisions			
The brand(s) can be relied on to keep its promises			
The brand(s) has the ability to accomplish what it says it will do			
The brand(s) can be relied on to keep its promises			
Community commitment	4.65 (1.17)	3.87 (1.15)[*]	0.77
I am proud to belong to the brand community on Twitter			
I feel a sense of belonging to the brand community on Twitter			
Community membership intention	5.00 (.97)	4.56 (1.05)[*]	0.58
I plan to join future activities of the brand(s) on Twitter			
I plan to be a regular visitor to the brand(s) on Twitter in the future			
I intend to stay on as a follower of the brand(s) on Twitter			
Twitter usage frequency	5.44 (1.32)	4.75 (1.7)[*]	
The total number of postings	137.98 (293.43)	59.75 (107.95)[*]	

[1] Standard deviations are in parentheses.
[*] Mean difference was significant at 0.01.

Table 2
Discriminant functions.

Variable	Structure coefficient
Brand identification	0.79
Community commitment	0.76
Twitter usage frequency	0.53
Brand trust	0.51
Community membership intention	0.51
The total number of postings	0.38

among their users, companies should make virtual communication on Twitter honest, authentic, reliable, and transparent. They should also demonstrate an online commitment by providing relevant and up-to-date information to their subscribers (Edman, 2010; Hallahan, 2008). Interpersonal communication (e.g., providing one-to-one feedback to consumers, responding to consumer complaints individually) could be a key source of competitive advantage that Twitter can hold over other SNSs. Indeed, Twitter significantly contributes to consumers' perceptions of trustworthiness concerning brand messages, and such perceptions stimulate consumers' information-forwarding behavior (Chiu et al., 2007; Phelps et al., 2004). Furthermore, a company's effort to make an online experience with the company or brand better not only enhances consumers' willingness to engage in eWOM on Twitter but also helps maintain quality long-term relationships with consumers.

5.1. Theoretical implications

Two theoretical implications can be drawn from the study's results. First, the present research affirms findings in the existing literature on self-brand connection. Relevant to further elaboration of the identity theory (Stryker, 1968)—the links between the self and social behavior—is the relationship between the self and brand. Brands hold symbolic meanings and signals that are socially constructed (Csikszentmihalyi and Rochberg-Halton, 1981; Dittmar, 1992), and individual consumers reconstruct and interpret meanings of brands, as well as enhance their self-concepts by associating themselves with brands in a form of purchase, display, or use (Belk, 1988; Escalas and Bettman, 2003). In this regard,

engaging in eWOM about a brand can be thought of as a means (or a more active way) of connecting the self and the brand. Consistent with self-brand congruity literature (e.g., Escalas and Bettman, 2005; Sirgy, 1985), the impact a brand has on individual consumers' willingness to engage in eWOM is greater when the brand is highly associated with the self.

Second, this study advances our understanding of consumer motivations related to eWOM behavior. In the context of a Twitter "brand community," where brand followers are little motivated to engage with other users (Kwon and Sung, 2011; Kwon et al., 2012), the community is not bound by close ties of kinship between followers of the same brands. From theoretical considerations, it seems less likely that the psychology of the categorization processes (social identity theory; Tajfel, 1982), which focuses on the perceived similarity with other members of the community, could fully explain the mechanism of eWOM behavior on Twitter. Instead, another strand of identity theory (Stryker and Burke, 2000) may provide a better account of how self-commitment leads to relevant social behaviors. Turning to the internal dynamics of self-process, the theory emphasizes the aspect of social behaviors that are influenced by the shared meaning of identities (Burke and Reitzes, 1981). For highly committed brand followers on Twitter, their identities are strongly developed in the meanings of the context (as a "publicly-displayed" fan or supporter of that brand), and consequently, they tend to engage in retweeting behavior in order to square with the meanings held in the standard (Freese and Burke, 1994). The act of retweeting brand messages can be seen as one's attempt to belong to the brand community, especially for one who is strongly attached to or engaged with the community.

5.2. Practical implications

The findings of this study yield significant managerial insights for marketing and social media practitioners. First, Twitter provides a unique, effective communication channel for facilitating brand eWOM among a wide range of consumers. The results from this study suggest that to gain "pass-along value" marketers, advertisers, and social media content creators should create content on Twitter. Findings from a study by eMarketer (2011) address a current marketing concern. That is, only one-fourth of

US Twitter users said they regarded *Promoted Tweets* from brands as relevant to them (eMarketer, 2011). Developing a social media marketing campaign to include content that provides informative or entertaining value could be a prerequisite for the success of brand eWOM on Twitter.

Second, marketing and social media professionals should, to facilitate their brand eWOM on Twitter, implement strategies that are more likely to be effective at engaging consumers demonstrating a high level of Twitter usage, namely, consumers known as "social influencers" (Chu and Kim, 2011). As can be seen from recent social media marketing cases (e.g., *Audi*'s A8 launch event, *Starbuck*'s free Pick Place Roast coffee sampling event), brands have come to acknowledge the importance of reaching and connecting with social media influencers by partnering with services that score social influence (e.g., *Klout*, *Kred*, *PeerIndex*). Brand marketers should invest a great deal of effort to tap into social influencers to spark conversations about the brand within social media environments. This should lead the brand to being connected to consumers who hitherto had no immediate connection with the brand. With the increasing importance of social networks and communities where consumers actively co-produce the value and meaning of brands, marketers should continue to value their investments in facilitating consumer-to-consumer eWOM communications (Kozinets, De Valck, Wojnicki, & Wilner, 2010).

Third, the interpersonal aspect of brand communication via Twitter plays an essential role in building a strong mutual relationship between brands and followers of those brands. The extent to which a brand follower is associated with a brand, in turn, determines his or her willingness to engage in eWOM communication. Given the mutually influencing relationship, interpersonal relationships made between a brand and its consumers can play dual roles. That is, while *externally* encouraging positive brand eWOM, the goal of establishing a strong, long-term, consumer-brand relationship and brand loyalty can also be achieved *internally*. This presents a unique and significant marketing opportunity to sustain current consumers and attract potential consumers.

5.3. Limitations and future research

Although the present study reveals implications for both researchers and practitioners, a few limitations should be acknowledged.

First, with regard to brand eWOM within the context of Twitter, this study investigated only the determinants of brand followers' retweeting behavior. Although the focus of the study was primarily on "retweeting" as a unique eWOM communication tool of Twitter, the findings provide no comprehensive account of brand eWOM on Twitter. Given the large number of brand followers who post information about brands in their tweets (82 percent), future research could examine another form of brand eWOM on Twitter, that is, consumer engagement in "mentioning" brands. Future research should take into account the valence of eWOM messages (positive or negative) to fully understand their effects; the valence may elicit different outcomes—that is, positive or negative eWOM (Hennig-Thurau et al., 2012).

Rather than an in-depth analysis, this study provides a snapshot of consumer engagement in brand eWOM on Twitter; it does so by comparing brand retweeters to brand non-retweeters. It is important to note that research in this area of study is still at an early stage. Thus, further research should adopt other research methods (e.g., in-depth interviews, experiments, longitudinal analyses) to fully validate these findings.

Lastly, the current study examined a limited set of brand relationship variables as predictors of eWOM communicated via Twitter. Following the consumer-brand relationship and brand community literature (Algesheimer et al., 2005; Chung and Darke, 2006; Zeithaml et al., 1996), other relevant brand variables, such as brand satisfaction and loyalty, may have influenced brand followers' participation in eWOM on Twitter. Adding such variables, as well as further analyzing the interrelationship between the proposed brand relationship variables, could represent another step in the exploration of this research area.

6. Conclusions

In sum, we conclude that Twitter offers a great, unique opportunity for brands to promote eWOM communication via brand retweets, thus enhancing marketing efforts. In SNS environments where consumers are closely connected to brands, we have demonstrated that consumer-brand relationships significantly contribute to consumers' willingness to engage in brand eWOM. Within the fast-growing social media platforms, the importance of developing and enhancing relationships between brands and consumers will continue to grow in brand eWOM.

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References

Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research, 31*(1), 87–101.

Algesheimer, R., Dholakia, U. M., & Herrman, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing, 69*(7), 19–34.

Allsop, D. T., Bassett, B. R., & Hoskins, J. A. (2007). Word-of-mouth research: Principles and applications. *Journal of Advertising Research, 47*, 388–411.

Bagozzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing, 23*, 450–461.

Bakshy, E., Hofman, J. M., Mason, W. A., & Watts, D. J. (2011). Everyone's an influencer: Quantifying influence on Twitter. In I. King, W. Nejdl, & H. Li (Eds.), *Proceedings of the fourth ACM international conference on Web search and data mining* (pp. 65–74). New York, NY: ACM Press.

Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research, 15*, 139–168.

Bennett, S. (2012). 60% of marketers say engagement still the only reliable way to measure social media ROI. *AllTwitter.* <http://www.mediabistro.com/alltwitter/social-media-roi-study_b28349> Accessed 03.12.12.

Birnbaum, M. H., & Stegner, S. E. (1979). Source credibility in social judgment: Bias, expertise, and the judge's point of view. *Journal of Personality and Social Psychology, 37*(1), 48–74.

boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*, 210–230. <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html> Accessed 03.12.12.

boyd, D. M., Golder, S., & Lotan, G. (2010). Tweet, tweet, retweet: Conversational aspects of retweeting on Twitter. In *Proceedings of the 43rd Hawaii international conference on system sciences* (pp. 1–10). Washington, DC: IEEE Computer Society Press.

Brown, J., Broderick, A. J., & Lee, N. (2007). Word-of-mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing, 21*(3), 2–19.

Burke, P. J., & Reitzes, D. C. (1981). The link between identity and role performance. *Social Psychology Quarterly, 44*, 83–92.

Burson-marsteller (2011). Asia-Pacific corporate social media study: How Asian companies are engaging stakeholders online. <http://www.slideshare.net/BMGlobalNews/bursonmarsteller-asia-pacific-corporate-social-media-study-2011-summary-presentation> Accessed 30.09.12.

Carlson, B. D., Suter, T. A., & Brown, T. J. (2008). Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research, 61*, 284–291.

Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters, 17*(2), 79–89.

Cha, M., Haddadi, H., Benevenuto, F., & Gummadi, K. P. (2010). Measuring user influence in Twitter: The million follower fallacy. In W. W. Cohen & S. Gosling (Eds.), *Proceedings of the 4th international AAAI conference on weblogs and social media* (pp. 10–17). New York, NY: ACM Press.

Chen, G. M. (2011). Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behavior, 27*(2), 755–762.

Chiu, H.-C., Hsieh, Y.-C., Kao, Y.-H., & Lee, M. (2007). The determinants of e-mail receivers' disseminating behaviors on the Internet. *Journal of Advertising Research, 47*(4), 524–534.

Chu, S.-C., & Choi, S. M. (2011). Electronic word-of-mouth in social networking sites: A cross-cultural study of the United States and China. *Journal of Global Marketing, 24*(3), 263–281.

Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising, 30*(1), 47–75.

Chung, C. M. Y., & Darke, P. R. (2006). The consumer as advocate: Self-relevance, culture, and word-of-mouth. *Marketing Letters, 17*, 269–279.

Csikszentmihalyi, M., & Rochberg-halton, E. (1981). *The meaning of things: Domestic symbols and the self*. Cambridge, UK: Cambridge University Press.

Delgado-Ballester, E., & Munuera-Alemán, J. L. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing, 35*(11/12), 1238–1258.

Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. New York, NY: St. Martin's Press.

Edman, H. (2010). Twittering to the top: A content analysis of corporate tweets to measure organization-public relationships. Unpublished Master Thesis, Louisiana State University, Baton Rouge, LA.

Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorization, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology, 29*, 371–389.

eMarketer (September 2, 2011). Twitterers give a big thumbs up to promoted tweets. <http://www.emarketer.com/Article/How-Social-Media-Users-Engage-with-Marketers-on-Twitter/1008572> Accessed 09.04.14.

emarketer (April 3, 2013). In South Korea, Facebook is companies' social network of choice. <http://www.emarketer.com/Article/South-Korea-Facebook-Companies-Social-Network-of-Choice/1009779> Accessed 23.06.13.

Escalas, J. E., & Bettman, J. R. (2003). You are what they eat: The influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology, 13*(3), 339–348.

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research, 32*, 378–389.

Flynn, L. R., Goldsmith, R. E., & Eastman, J. K. (1996). Opinion leaders and opinion seekers: Two new measurement scales. *Journal of the Academy of Marketing Science, 24*(2), 137–147.

Freese, L., & Burke, P. J. (1994). Persons, identities, and social interaction. B. In Markovsky, K. Heimer, & J. O'Brien (Eds.), *Advances in group processes* (pp. 1–24), 11, Greenwich, CT: JAI Press.

Gruzd, A., Wellman, B., & Takhteyev, Y. (2011). Imagining Twitter as an imagined community. *American Behavioral Scientist, 55*(10), 1294–1318.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. NJ: Prentice-Hall.

Hallahan, K. (2008). Organizational-public relationships in cyberspace. In T. Hansen-Horn & B. D. Neff (Eds.), *Public relations: From theory to practice* (pp. 46–63). Boston, MA: Pearson.

Hennig-Thurau, T., Wiertz, C., & Feldhaus, F. (2012). Exploring the "Twitter effect": An investigation of the impact of microblogging word-of-mouth on consumer's early adoption of new products. Working paper. <http://ssrn.com/abstract=2016548> Accessed 02.12.12.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing, 18*(1), 38–52.

Hoffman, D. L., & Fodor, M. (2010). Can you measure the ROI of your social media marketing? *MIT Sloan Management Review, 52*(1), 41–50.

Hon, L. C., & Grunig, J. E. (1999). *Guidelines for measuring relationships in public relations*. Gainesville, FL: The Institute for Public Relations.

Huang, C.-C., Lin, T.-C., & Lin, K.-J. (2009). Factors affecting pass-along email intentions (PAEIs): Integrating the social capital and social cognition theories. *Electronic Commerce Research & Applications, 8*(3), 160–169.

Hung, K. H., & Li, S. Y. (2007). The influence of eWOM on virtual consumer communities: Social capital, consumer learning, and behavioral outcomes. *Journal of Advertising Research, 47*(4), 485–495.

Jansen, B. J., Zhang, M., Sobel, K., & Chowdhury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology, 60*(11), 2169–2188.

Jarvenpaa, S. L., Knoll, K., & Leidner, D. E. (1998). Is anybody out there? Antecedents of trust in global virtual teams. *Journal of Management Information Systems, 14*(4), 29–64.

Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. S. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of Marketing, 74*, 71–89.

Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? In *Proceedings of the 19th international conference on World Wide Web (WWW)* (pp. 591–600), New York, NY: ACM Press.

Kwon, E.-S., & Sung, Y. (2011). Follow me! Global marketers' Twitter use. *Journal of Interactive Advertising, 12*(1), 4–16. <http://jiad.org/article149> Accessed 30.09.12.

Kwon, E.-S., Kim, E., Sung, Y., & Yoo, C. Y. (2012). Motivations for following brands and attitudes toward brand communications on Twitter. In *Proceedings of the*

2012 *American Academy of Advertising Conference* (p. 56), Knoxville, TN: American Academy of Advertising.

Lin, J.-S., & Peña, J. (2011). Are you following me? A content analysis of TV networks' brand communication on Twitter. *Journal of Interactive Advertising, 12*(1), 17–29. <http://jiad.org/article150> Accessed 30.09.12.

McAlexander, J. H., Schouten, J. W., & Koenig, H. (2002). Building brand community. *Journal of Marketing, 66*(1), 38–54.

Muniz, A. M., Jr., & O'Guinn, T. C. (2001). Brand community. *Journal of Consumer Research, 27*, 412–432.

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising, 30*(1), 13–46.

Norman, A. T., & Russell, C.A. (2006). The pass-along effect: Investigating word-of-mouth effects on online survey procedures. *Journal of Computer-Mediated Communication, 11*(4). <http://jcmc.indiana.edu/vol11/issue4/norman.html> Accessed 30.09.12.

Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research, 44*(4), 333–348.

Richins, M. L. (1984). Word of mouth communication as negative information. In T. C. Kinnear (Ed.), *Advances in Consumer Research* (pp. 697–702), 11, Provo, UT: Association for Consumer Research.

Ridings, C. M., Gefen, D., & Arinze, B. (2002). Some antecedents and effects of trust in virtual communities. *Journal of Strategic Information Systems, 11*, 271–295.

Rubin, A. M. (2009). Uses-and-gratifications perspective on media effect. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed.. New York, NY: Routledge.

SCOTOSS Consulting (2011). 2011 Engagement Plus Study. <http://www.slideshare.net/scotoss/2011-trend-report> Accessed 30.09.12.

Sirgy, M. J. (1985). Using self-congruity and ideal congruity to predict purchase motivation. *Journal of Business Research, 13*, 195–206.

Stryker, S. (1968). Identity salience and role performance. *Journal of Marriage and the Family, 4*, 558–564.

Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly, 63*(4), 284–297.

Suh, B., Hong, L., Pirolli, P., & Chi, E. H. (2010). Want to be retweeted? Large scale analytics on factors impacting retweet in Twitter network. In A. K. Elmagarmid & D. Agrawal (Eds.), *Proceedings of the 2nd IEEE international conference on social computing* (pp. 177–184). Los Alamitos, CA: IEEE Computer Society Press.

Sun, T., Youn, S., Wu, G., & Kuntaraporn, M. (2006). Online word-of-mouth (or mouse): An exploration of its antecedents and consequences. *Journal of Computer-Mediated Communication, 11*(4). <http://jcmc.indiana.edu/vol11/issue4/sun.html> Accessed 30.09.12.

Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: A motivational analysis. In J. W. Alba & J. W. Hutchinson (Eds.), *Advances in Consumer Research* (pp. 527–531), 25, Provo, UT: Association for Consumer Research.

Sung, Y., Kim, Y., Kwon, O., & Moon, J. (2010). An explorive study of Korean consumer participation in virtual brand communities in social network sites. *Journal of Global Marketing, 23*, 1–16.

Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge, UK: Cambridge University Press.

Taylor, D. G., Strutton, D., & Thompson, K. (2012). Self-enhancement as a motivation for sharing online advertising. *Journal of Interactive Advertising, 12*(2), <http://jiad.org/article155> Accessed 30.09.12.

Twitter.COM. *Twitter Help Center*. <https://support.twitter.com/articles/142101-what-are-promoted-tweets#> Accessed 03.12.12.

Vollmer, C., & Precourt, G. (2008). *Always on: Advertising, marketing, and media in an era of consumer control*. New York, NY: McGraw Hill.

Walsh, G., Gwinner, K. P., & Swanson, S. R. (2004). What makes mavens tick? Exploring the motives of market mavens' initiation of information diffusion. *Journal of Consumer Marketing, 21*, 109–122.

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly, 29*(1), 35–58.

Ye, S., & Wu, S. F. (2010). Measuring message propagation and social influence on Twitter.com. In *Social Informatics* (pp. 216–231), Berlin: Heidelberg: Springer.

Yeh, Y.-H., & Choi, S. M. (2011). Mini-lovers, maxi-mouths: An investigation of antecedents to eWOM intention among brand community members. *Journal of Marketing Communication, 17*(2), 145–162.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*, 31–46.

Zhang, M., Jansen, B. J., & Chowdhury, A. (2011). Business engagement on Twitter: A path analysis. *Electronic Markets, 21*, 161–175.

Zhao, D., & Rosson, M. B. (2009). How and why people Twitter: The role that micro-blogging plays in informal communication at work. In *Proceedings of the ACM 2009 international conference on supporting group work* (pp. 243–252). New York, NY: ACM Press.

Zhou, Z., Zhang, Q., Su, C., & Zhou, N. (2012). How do brand communities generate brand relationships? Intermediate mechanisms. *Journal of Business Research, 65*(7), 890–895.