Using a consumer socialization framework to understand electronic word-of-mouth (eWOM) group membership among brand followers on Twitter

Shu-Chuan Chu\textsuperscript{a}, Yongjun Sung\textsuperscript{b,\*}

\textsuperscript{a}College of Communication, DePaul University, United States
\textsuperscript{b}Department of Psychology, Korea University, Republic of Korea

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A B S T R A C T

With the real-time brand communications prevalent in Twitter, it has emerged as an increasingly important social technology that facilitates brand-focused electronic word-of-mouth (eWOM) activities. The objective of the current research is to examine the factors which discriminate between Twitter brand followers’ decisions to engage in eWOM behaviors on the site. Specifically, this study proposes that peer communication, brand-related factors, and Twitter usage motivate brand followers to share eWOM messages on Twitter. Results from an online survey showed that brand followers who serve as role-models to others, those with positive attitudes toward and relationships with brands on Twitter, those who most heavily use Twitter and follow many brands, were most likely to tweet brands. Similar patterns were found in terms of retweeting the links of brands. This study contributes to the literature by demonstrating that Twitter is a socialization agent that facilitates eWOM and provides useful insights for social media marketers.

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1. Introduction

Broadly defined as information exchange among consumers, word-of-mouth (WOM) has long been recognized as an important source of information that influences consumer decision making. For example, Mochalova and Nanopoulos (2014) suggest that recommendations that are based on consumers’ social ties play a pivotal role when choosing a product or service. Past research has indicated that WOM is linked to attitudes and behavior, customer satisfaction (Lang 2011), and technology acceptance (Parry et al. 2012). Because people are likely to trust information given by a friend or acquaintance (Feick and Price 1987; Jurvetson 2000), WOM is able to influence consumers’ opinions, attitudes and decisions.

As media continue to evolve, electronic word-of-mouth (eWOM) can reach large numbers of consumers (Hung and Li 2007) and influence attitudes (Chang et al. 2013), product judgments (Lee and Youn 2009), and sales (Chevalier and Mayzlin 2006). Steffes and Burgee (2009) suggest that the Internet has allowed consumers to exchange brand-related information and share purchase experience in a way similar to how they do offline. With the emergence of social technologies available to Internet and smartphone users, social media such as Facebook, Twitter, and Pinterest have empowered consumers to engage in brand-related eWOM and have emerged as promotional tools for marketing (Araujo and Neijens 2012; Liu et al. 2010; McCarthy et al. 2014) and eCommerce (Sharma and Crossler 2014).

In particular, Twitter has attracted marketers to build brand profiles that allow consumers to become “brand followers” and obtain immediate brand messages (Burton and Soboleva 2011; Kwon and Sung 2011). More importantly, tweets are passed on from one follower to many others, propagating the information to millions of Twitter users (Liu et al. 2012). According to a recent forecast by eMarketer (2013), Twitter’s ad revenue is expected to reach $1 billion in 2014. The social applications of Twitter enable consumers to interact with one another to seek information, provide advice, and comment on their consumption experiences. The speed and global reach of eWOM on Twitter provide marketers with a means to leverage the power of peer communication and consumer-brand relationships (Kwon and Sung 2011). Therefore, the concept of eWOM is extremely important for a variety of online consumption communities, especially for Twitter as brands seek new ways to develop long-term relationships with their consumers and enhance customer equity (Kim and Ko 2012).

Consumer socialization suggests that individuals function as consumers in the marketplace by acquiring knowledge, skills,
and attitudes from others through communication (Ward 1974). With the increasing popularity of social media, consumer socialization using social media websites has received mounting attention in recent years (Wang et al. 2012). In their study, Wang et al. (2012) found that consumer socialization through peer communication about products on social media is positively related to product attitudes. Using a consumer socialization framework, our study proposes that peer communication, brand-related factors, and Twitter usage motivate brand followers to share eWOM messages on Twitter. Peer communication is an important source of influence, or a “socialization agent,” for young consumers (Moschis and Churchill 1978) and is found to influence many aspects of consumer behavior. Social media facilitate peer-to-peer communication, representing a new form of consumer socialization (Wang et al. 2012) that may have an impact on Twitter users’ eWOM behaviors. When consumers follow brands on Twitter, the brands may create favorable brand attitudes, resulting in more loyal consumers. Thus, an examination of brand followers’ attitudes toward brands and brand relationship quality is needed. Yet little research attention has been paid to peer communication and brand-related factors in the social media context within the consumer socialization framework.

As more and more consumers access Twitter accounts through mobile applications (Lee and Cho 2011), the potential impact of eWOM on Twitter expands exponentially. However, no research to date has examined the factors that influence Twitter users’ decisions to engage or not to engage in eWOM on the site. Compared to another major social networking site (hereafter SNS), Facebook, there is a relatively limited understanding of Twitter users’ information sharing behaviors. While a few studies have analyzed brand-focused eWOM patterns on Twitter (Jansen et al. 2009; Smith et al. 2012), it is unclear what makes consumers willing or reluctant to participate in brand conversations on Twitter. To fill this gap, the objective of the current research is to demonstrate that Twitter is a socialization agent that facilitates eWOM by examining the factors which discriminate between Twitter brand followers’ decisions to engage in eWOM behaviors on the site. Using discriminant analysis, eWOM group membership in Twitter will be examined.

By empirically investigating how three major factors (peer communication, brand-related factors, and Twitter usage) influence consumers’ eWOM patterns on Twitter, this study contributes to the theoretical knowledge of eWOM in a social network environment. From a managerial standpoint, results of this study offer significant implications to marketers in developing effective and efficient Twitter accounts as a form of online communication.

2. Literature review

2.1. Electronic word-of-mouth (eWOM) in social media

A widely used definition of eWOM is “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau et al. 2004, p. 39). For the purpose of this study, eWOM is conceptualized as any positive or negative brand-related content that is generated by consumers or passed on among peer consumers through the Internet.

Over the past few years, a growing body of research has examined eWOM in the domain of marketing communications (e.g., Chen et al. 2014; Cheung et al. 2009; Chevalier and Mayzlin 2006; Hennig-Thurau et al. 2004). For example, Chevalier and Mayzlin (2006) examined the effects of eWOM regarding consumer reviews on product success and found that positive reviews lead to an increase in sales. Hennig-Thurau et al. (2004) investigated factors that motivate consumers to engage in eWOM via consumer-opinion platforms and found that motives of consumer online articulation include consumers’ concern for other customers, the potential for self-enhancement, desire for social interactions, desire for economic incentives, and (to a lesser extent) advice seeking. Further, Cheung et al. (2009) suggest that the informational (i.e., argument strength, source credibility, confirmation with prior belief) and normative (i.e., recommendation consistency and aggregate rating) determinants influence consumers’ evaluations of the credibility of online consumer recommendations.

A unique perspective of social media is that eWOM communication typically occurs between users who have pre-existing social relationships with one another, thus increasing the credibility and persuasive nature of eWOM therein (Chu and Kim 2011; Coulter and Roggeveen 2012). Recently, a few studies have extended eWOM research to the online social media context (e.g., Chen et al. 2014; Katona et al. 2011; Trusov et al. 2009). For example, Coulter and Roggeveen (2012) tested the effects of eWOM communication on persuasion in SNSs. Specifically, Coulter and Roggeveen (2012) investigated how source, network, and message/content factors affect consumers’ responses to eWOM, such as product awareness, knowledge, and liking in SNSs. Findings of their study suggest that source expertise is an important determinant of the effectiveness of eWOM communication. However, the impact of source closeness on consumers’ decisions to seek product knowledge was not confirmed.

Trusov et al. (2010) identified influential users in SNSs and their impact on others’ activity (i.e., creating or consuming content). The results of the study suggest that users’ social contacts influence their eWOM behaviors on the site, and thus the site’s overall page view count and future advertising revenue. Their study provides implications for marketing communications targeting and retention efforts, as most content in SNSs is user-generated, and sustaining the usage of influential users is critical (Trusov et al. 2010). In another study, Katona et al. (2011) examined the diffusion process in SNSs and demonstrated that the number of a user’s friends who are adopters has a positive impact on his/her adoption probability and signals the best prospects for encouraging eWOM.

Overall, the emerging research on eWOM in social media suggests that social media facilitate eWOM communication among consumers (McCarthy et al. 2014) and enable marketers to interact with their customers in order to establish long-term relationships. Further, brand-related content generated or endorsed by peer friends is more likely to be considered as trustworthy and reliable.

2.2. eWOM among brand followers in Twitter

Founded in 2006, Twitter is a microblogging social application that allows users to post (tweet), view, and forward (retweet) short messages of up to 140 characters in length (Smith et al. 2012). Of note is that the majority of Twitter posts are sent or received from mobile devices and are visible to the user’s followers on a Twitter page. The technical design of Twitter permits a user to post hyperlinks to news websites, pictures, and blogs that are displayed in the stream of those following the user (Smith et al. 2012). Jansen et al. (2009) characterize posts or tweets as “immediate, ubiquitous, and scalable” (p. 2170). Given its unique characteristics, Twitter enables consumers to freely share brand-related information, conduct product comparisons, and increase interactive communications with companies (Burton and Soboleva 2011). With real-time brand communications prevalent in Twitter, it has emerged as an increasingly important social technology that facilitates brand-focused eWOM activities.

eWOM on Twitter differs from real life WOM situations in that traditional offline WOM tends to occur in a spoken, interpersonal
communication setting (Rogers 1995), while eWOM messages on Twitter can be viewed simultaneously by many other consumers via the Internet (Chu and Choi 2011). In addition, eWOM interactions on Twitter are available to large global audiences quickly given that the Internet allows for information sharing without time and location constraints. Moreover, consumers have greater control over their eWOM behaviors on Twitter because consumers can decide when and how they receive content from their social contacts. Thus, brand-focused eWOM on Twitter is becoming an important source of marketing information that deserves attention from researchers and practitioners.

Jansen et al.’s (2009) pioneering study argues that Twitter is a new form of eWOM for consumers to share information about brands. Based on their content analyses of posting (tweets) concerning brands, Jansen et al. (2009) suggest that common topics in tweets include asking questions, describing interests, expressing attitudes, opinions, and sharing information, news, or updates on daily activities. More importantly, they found that 19% of posts contain brand-related information, with both positive and negative brand sentiments. Results of Jansen et al.’s (2009) study also show that users are more likely to comment, seek, provide, and share information on the brand when the brand is the primary focus in the tweet.

In another recent study, Smith et al. (2012) content analyzed brand-related user-generated content between Twitter, Facebook, and YouTube and identified differences among the three platforms. Promotional self-presentation is less of a focus on conversation-based Twitter, compared to Facebook and YouTube. However, brand centrality was found to be an important dimension for brand-related content on Twitter, given its focus on disseminating information and sharing news (Smith et al. 2012). Additionally, Liu et al. (2012) found that source trustworthiness, source expertise, source attractiveness, and the numbers of multimedia in a message have positive effects on information retweeting in microblogging. These findings have significant implications for eWOM on Twitter, suggesting that Twitter is a particularly useful channel for eWOM communication and that academic research in this area is needed.

Social media enable socialization through online communities where consumers share information about products and brands (Wang et al. 2012). As academic interest on Twitter increases, an interesting question arises: what variables discriminate Twitter brand followers’ eWOM behaviors? Identifying factors that differentiate tweet/no tweet and retweet/no retweet patterns in text-based Twitter could help researchers explicitly conceptualize and measure eWOM developed within this particular social platform. The next section describes the conceptual framework that outlines (1) peer communication, (2) brand-related factors, and (3) usage as discriminants of eWOM group membership in Twitter.

3. Conceptual framework

The main objective of this study was to demonstrate that Twitter is a socialization agent that facilitates eWOM. To achieve this goal, a conceptual framework that delineates the relationships among the key variables was developed to identify factors that discriminate users’ decisions to engage in brand-related eWOM on Twitter. Specifically, three broad factors related to users’ tweet and retweet behaviors were examined: (1) peer communication factors (modeling and reinforcement), (2) brand-related factors (brand attitude and brand relationship quality), and (3) Twitter usage factors (the length of Twitter usage and the number of brands they follow). Brand-related eWOM on Twitter was conceptualized as respondents’ tweeting and retweeting at brands on Twitter. Tweeting captures the concepts of brand-related information seeking and giving, while retweeting examines information passing among brand followers on Twitter. Fig. 1 presents the conceptual framework.

3.1. Consumer socialization

According to Ward (1974), consumer socialization is described as “collective processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace” (p. 2). The consumer socialization framework provides a foundational means of understanding how individuals develop consumption-related cognitions, attitudes, social roles, and behaviors. Drawing from the general socialization concept, the theoretical foundations of consumer socialization assumes that individuals develop their attitudinal and behavioral patterns partly as a result of their interactions and learning with socialization agents, such as parents and peers (Moschis and Churchill 1978). Peers groups are one of the most recognized socialization agents and have been found to be highly influential in shaping consumption-related decision-making (Singh et al. 2006).

One of the most frequently used theoretical perspectives to explain the consumer socialization process is the social learning theory (Moschis 1987). The social learning perspective places emphasis on the external sources of socialization, such as peers and parents (de Gregorio and Sung 2010). Individuals develop norms and models of attitudes, values, and behaviors through the learning process. The social learning perspective is largely used by consumer socialization research to explain the process with regard to how individuals learn to perform their roles as consumers (Moschis and Churchill 1978).

In this study, we focus on the peer communication aspect of consumer socialization to explore the factors that determine consumers’ eWOM behavior on Twitter. Given the general assumption of the effects of peer communication on both consumption attitudes and behaviors (Bush et al. 1999; Lee et al. 2007), we propose that peer communication discriminates eWOM group membership in Twitter.

3.2. Peer communication factors

Considered fundamental human traits, people’s interactions and communications with peers are due to psycho-physiological and sociological need gratification (Ward 1974). Peer communication is defined as overt peer interactions related to goods and services (Moschis and Churchill 1978) and is widely acknowledged as an important socialization agent in the consumer socialization framework. As previously mentioned, consumer socialization suggests that young people develop attitudes and behaviors related to consumption by learning and interacting from socialization agents such as parents, peers, school, and mass media (Churchill and Moschis 1979; Moschis and Churchill 1978; Ward 1974). Learning processes including modeling, reinforcement, or social interaction are the primary mechanisms through which consumers, or “learners,” become socialized to display particular norms, attitudes, and behaviors (Moschis and Churchill 1978).

Following Lueg and Finney’s (2007) study, the current research examines only modeling and reinforcement learning processes. Social interaction involves both the agent of influence and the agent’s style of influence, which goes beyond the scope of the present study. The modeling component of peer communication concerns a learner’s imitation or mimicking of the behaviors of a socialization agent (Moschis and Churchill 1978). In this case, the learner may model the behaviors he or she observed and perform the same behaviors the agent performs. On the other hand, the reinforcement learning process indicates that a consumer is
socialized to adopt or avoid some behaviors (e.g., buying a certain brand) based on reward or punishment as a consequence (Lueg and Finney 2007). The reinforcement process of peer communication is oral in nature and usually takes the form of spoken communication (Lueg and Finney 2007).

Today, social media are integrated into the daily lives of young consumers. These socially connected consumers learn knowledge, attitudes, behaviors, and skills by observing or communicating with peers through social media (Wang et al. 2012). Taylor et al. (2011) suggest that peers are socialization forces that affect online consumers’ attitudes toward social network advertising. In their recent study, Wang et al. (2012) investigated peer communication through social media and its impacts on product attitudes and purchase decisions. They found that individual-level tie strength and group-level identification with the peer group have positive influences on peer communication outcomes.

In the case of Twitter, the website allows users to connect with peers by “following” them, which facilitates communication among peer groups. Twitter, as a new socialization agent, has expedited the eWOM process because peers can provide vast amounts of product information quickly and easily. Lueg and Finney (2007) reported that online shopping behaviors depend greatly on online peer communications. Further, de Gregorio and Sung (2010) demonstrated that peer communication strongly predicts adult consumers’ attitudes and behavioral responses toward product placement. Along these lines, brand followers’ eWOM behaviors on Twitter may be influenced by their peers through spoken (reinforcement) and unspoken (modeling) communication. When Twitter users are encouraged by peers to follow brands on Twitter (reinforcement), these users are likely to adopt similar behavior, due to rewards, and consequently join brand discussions. However, Twitter users may get punished if they do not engage in eWOM on Twitter (e.g., exclusion from the communication). In addition, users observe attitudes and behaviors through tweets and retweets sent by peers (modeling). For example, a consumer may imitate a peer’s behavior of following brands on Twitter or engage in eWOM. In sum, the modeling and reinforcement processes through Twitter provide a means of learning how to use Twitter as a source of brand information and are conceptualized as factors that discriminate eWOM group membership. Thus, the first set of hypotheses are formulated as follows:

H1a. The modeling process is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, the modeling process is a good predictor of eWOM behaviors among brand followers on Twitter.

H1b. The reinforcement process is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, the reinforcement process is a good predictor of eWOM behaviors among brand followers on Twitter.

3.3. Brand-related factors

Another theoretical perspective that plays an important role in the consumer socialization process and which may explain Twitter brand followers’ participation in eWOM is consumer-brand relationships. Twitter’s distinct characteristics and capacities to share information about brands lead to its potential to considerably impact eWOM marketing, which help build consumer-brand relationships (Jansen et al. 2009). Past research has applied the relationship concept to the consumer-brand domain and suggests the brand as a relationship partner (e.g., Aaker et al. 2004; Fournier 1998). In Fournier’s (1998) seminal work, the concept of brand relationship quality was introduced to conceptualize and evaluate relationship strength. Guided by the interpersonal relationship literature, Fournier (1998) identified six facets of brand relationship quality including: love and passion, self-connection, interdependence, commitment, intimacy, and brand partner quality. Other empirical investigations emphasize the importance of trust in defining brand relationship quality and suggest that it is incorporated into advertising, public relations, and customer-relationship management programs (Nguyen and Nguyen 2011).

Only a few studies have related brand relationship quality to WOM or eWOM. For example, Tsao and Hsieh (2012) examined
the effects of brand relationship quality on eWOM communication. The results from their empirical study showed that brand commitment is likely to stimulate positive eWOM communication, while brand satisfaction and trust did not. However, in circumstances where consumer-brand relationships are self-relevant, the end of the relationships may lead to anti-brand retaliatory behaviors, such as negative WOM (Johnson et al. 2011). Additionally, Christodoulides et al. (2011) related user-generated content to WOM and discussed the role of brand relationships in the rising popularity of user-generated content.

Given that Twitter has changed the way consumers participate in the communication process, Twitter users form relationships with brands by following brands, and these relationships may have a determined effect on their eWOM activities. Building on the concept of brand relationship quality, the nature of the relationship between brands and consumers on Twitter may be associated with their tweet and retweet behaviors concerning brands. Specifically, Twitter users with a more favorable attitude toward the brands they follow and a higher perceived relationship quality with those brands are more likely to be active participants in the creation and spread of eWOM on Twitter. In contrast, when the degree of connectedness between Twitter users and brands is low, they are less likely to engage in eWOM in order to share with others their experiences and thoughts with brands. Past research indicates that tweets usually contain sentiments about brands (Burton and Soboleva 2011). Accordingly, brand attitude and brand relationship quality are conceptualized as two important brand-related factors that help determine eWOM group membership in Twitter. Hence, the second set of hypotheses are presented as follows:

H2a. Brand attitude is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, brand attitude is a good predictor of eWOM behaviors among brand followers on Twitter.

H2b. Brand relationship quality is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, brand relationship quality is a good predictor of eWOM behaviors among brand followers on Twitter.

3.4. Twitter usage factors

According to Pew Research (Smith and Brenner 2012), Twitter usage continues to grow, with 15% of online adults having a Twitter account and 8% using it on a typical day. The report indicates that such growth is due to the rapid rise of mobile technologies, as Twitter usage is highly correlated with smartphone ownership (Smith and Brenner 2012). Of interest is that young users between the ages of 18–24 have high rates of Twitter usage, with nearly one third of Internet users in this demographic group (31%) being Twitter users (Smith and Brenner 2012). These findings are in line with previous descriptions of young consumers using Twitter to develop relationships with brands and to be socialized through peer communication.

As Twitter use increases among young consumers, brands have to adopt this emerging, unconventional marketing platform in order to encourage positive eWOM communication. Brand profile pages on Twitter invite consumers to “follow” the brand, share ideas with peers, download coupons, participate in sweepstakes, post comments about the brand, and allow consumers to receive attention from their peers (Rui and Whinston 2012). Such brand profile pages also serve as an eWOM vehicle for brands to provide brand information, answer product questions, and combat negative eWOM in order to generate awareness, interest, as well as establish brand image and equity (Bruhn et al. 2012).

Given the potential of Twitter as a socialization agent and a means for brand-related eWOM communication, brand followers with a higher degree of Twitter usage and number of brands they follow are more likely than average users to engage in eWOM on Twitter. As the length of Twitter usage increases, these users are more likely to be familiar with the technologies offered by Twitter and may feel more comfortable to tweet and retweet at brands, thereby engaging in eWOM behaviors. The number of brands they follow may also influence their chances to participate in eWOM conversations: that is, the more brands a Twitter user follows, the more opportunities exist for a user to be exposed to marketing messages which can be passed along. As a result, usage factors, including the length of Twitter use and the number of brands a user follows, are examined in terms of their discriminative effects on eWOM group membership in Twitter.

H3a. The length of Twitter use is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, the length of Twitter use is a good predictor of eWOM behaviors among brand followers on Twitter.

H3b. The number of brands a user follows is related to Twitter brand followers’ engagement in eWOM behaviors. Specifically, the number of brands a user follows is a good predictor of eWOM behaviors among brand followers on Twitter.

4. Method

4.1. Participants and procedure

An online survey of undergraduate students was carried out to test the hypotheses. The sample was collected through an online participant pool from a School of Advertising and Public Relations at a major university in the southwestern region of the United States. In the participant pool, participants were recruited from a variety of undergraduate advertising classes, ranging from introductory courses to senior level courses. The sample consisted of students of all years— from freshmen to seniors. These students are active social media users and they are familiar with the features of each platform, such as Twitter. They were given extra credit for their completion of the survey. All participants were screened to be Twitter users who also follow brands. Out of 235 surveys collected, 175 were included in data analysis after eliminating incomplete responses and responses that did not meet criteria (i.e., following brands). A college student sample was deemed appropriate because this group comprises the major segment of Twitter users (Smith and Brenner 2012).

4.2. Measures

The survey consists of four sections. First, respondents’ eWOM behaviors were examined. They were asked if they had ever tweeted at brands and whether they had ever retweeted links for brands they follow. Second, survey items were modified from previous studies to measure key variables, including modeling, reinforcement, brand attitude, and brand relationship quality. Third, Twitter usage was captured. Specifically, respondents were asked to indicate the number of followers, the number of people they are following, and the number of brands they follow. Lastly, demographic characteristics, such as gender, age, ethnicity, and income, were gauged.
4.2.1. Electronic word-of-mouth (eWOM)

Chu and Kim (2011) conceptualized social networking site users’ eWOM behaviors as three specific dimensions: opinion seeking, opinion giving, and opinion passing. Following their conceptualization, in this study, eWOM was operationalized as respondents’ tweet and retweet behaviors on Twitter. To investigate if respondents are seeking, giving (tweet), or passing (retweet) brand-related information on Twitter, two items were used. Specifically, participants were asked “Have you ever tweeted at brands you are following?” and “Have you ever retweeted the links of brands you are following?” with choices including Yes and No.

4.2.2. Peer communication: modeling and reinforcement

Drawing on Lueg and Finney’s (2007) conceptualization, peer communication comprised two behavioral aspects: spoken and unspoken. Spoken is related to reinforcement and unspoken refers to modeling. Thus, peer communication was operationalized as any spoken or unspoken messages that Twitter users’ peers send to each other to approve or encourage certain behaviors (i.e., following brands). Four items were used to measure reinforcement and three items were used to gauge modeling (adopted from Lueg and Finney 2007, see Table 1 for specific measures). All items were measured on a 7-point Likert scale, ranging from (1) strongly disagree to (7) strongly agree.

4.2.3. Brand attitude and relationship quality

Brand attitude was measured with three items on a 7-point, semantic differential scale anchored by bad/good, dislike/like, and negative/positive (Baker et al. 2004). To measure brand relationship quality, the Quality of Interpersonal Relationships Scale (Sénécal et al. 1992) was adapted to the current study context. Using a 7-point Likert scale (1 = “not at all” and 7 = “extremely”), participants rated to what extent the relationships they have with the brands they follow on Twitter are (1) enriching, (2) satisfying, (3) harmonious, and (4) trustworthy.

4.2.4. Twitter usage

The length of Twitter use was measured by using the item “How long have you been using Twitter?” The response set included year(s) and month(s). To measure the frequency of use on an average day, another item asked participants, “How often do you log on to Twitter or check your account on an average day?” In terms of the number of followers, the number of people they are following, and the number of brands they follow, three items were used respectively. They were: “How many followers do you have?”, “How many people do you follow?”, “What are you following?”

5. Results

5.1. Sample characteristics

Among the total respondents, 113 (64.6%) were female and 62 (35.4%) were male. Their ages ranged from 18 to 39 with a mean age of 21 (S.D. = 2.94). Anglo Americans comprised 52.6% of the sample (n = 92), followed by Hispanics (n = 34), Asian Americans (n = 23), African Americans (n = 7), and others (n = 19). Table 1 shows some descriptive statistics for the general use of Twitter of the respondents.

5.2. Measures and principal component analysis (PCA)

Before examining the proposed hypotheses, a principal component analysis with a varimax rotation was conducted to scrutinize the 14 items (four items for relationship quality, three items for brand attitude, four items for reinforcement, and three items for modeling) (see Table 2). The PCA supported a four-component solution comprising relationship quality, brand attitude, reinforcement, and modeling. As shown in Table 2, the four factors explained 74.3% of the variance. The first factor, reinforcement (peer communication), accounted for 21.7% of the variance and its four items formed a reliable scale as assessed by Cronbach’s alpha (α = .89). With four items, the second factor, relationship quality, explained 20.6% of the variance (α = .85). The third factor, brand attitude, with three items, accounted for 17.4% of the variance (α = .88). Finally, the last factor, modeling (peer communication), accounted for 14.6% of the variance and was found to be internally consistent (α = .75). Based on the results of the PCA and reliability analyses, a single measure of each relevant predicting variable was formed by averaging across items and was taken forward along with the two additional predicting variables (i.e., the length of Twitter usage and the total number of brands they follow) for discriminant analysis.

Table 2

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<th>1</th>
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<tbody>
<tr>
<td>Peer communication: reinforcement (α = .89)</td>
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<tr>
<td>My peers encourage me to follow brands on Twitter</td>
<td>.87</td>
<td>.13</td>
<td>.03</td>
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<td>My peers and I tell each other what brands to follow on Twitter</td>
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<td>.17</td>
<td>.00</td>
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<td>I spend a lot of time talking with my peers about following brands on Twitter</td>
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<td>.02</td>
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<td>I ask my peers for advice about following brands on Twitter</td>
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<td>.09</td>
<td>.07</td>
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<td>Quality of brand relationship (α = .85)</td>
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<td>To what extent, the relationships you have with the brands on Twitter are harmonious</td>
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<td>.83</td>
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<td>To what extent, the relationships you have with the brands on Twitter are inspire trust</td>
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<td>Brand attitude (α = .88)</td>
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<td>How do you feel about the brands you follow? (Negative–Positive)</td>
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<td>.89</td>
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<td>How do you feel about the brands you follow? (Dislike–Like)</td>
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</tr>
<tr>
<td>My peers and I follow the same brands on Twitter</td>
<td>.02</td>
<td>.09</td>
<td>−.16</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>3.0</td>
<td>2.9</td>
<td>2.4</td>
</tr>
<tr>
<td>% of variance</td>
<td>21.7</td>
<td>20.6</td>
<td>17.4</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>21.7</td>
<td>42.5</td>
<td>59.7</td>
</tr>
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</table>

Table 1

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months in using Twitter</td>
<td>18.33</td>
<td>12.63</td>
</tr>
<tr>
<td>Times in logging on Twitter a day</td>
<td>5.03</td>
<td>6.79</td>
</tr>
<tr>
<td>Number of people/accounts follow</td>
<td>149.67</td>
<td>156.41</td>
</tr>
<tr>
<td>Number of followers</td>
<td>108.71</td>
<td>239.23</td>
</tr>
<tr>
<td>Times in tweeting per week</td>
<td>10.91</td>
<td>25.65</td>
</tr>
<tr>
<td>Times in retweeting per week</td>
<td>4.62</td>
<td>7.59</td>
</tr>
<tr>
<td>Number of brands following</td>
<td>12.67</td>
<td>17.42</td>
</tr>
</tbody>
</table>
5.3. Discriminant analysis and eWOM group membership in Twitter

Discriminant analysis was employed to determine whether six variables—reinforcement, modeling, brand attitude, brand relationship quality, Twitter usage length, and the total number of brands they followed—could discriminate eWOM behavior in the context of Twitter (i.e., tweet vs. no tweet at brands and retweet vs. no retweet the links of brands).

5.3.1. Tweet vs. no tweet at brands

One function was generated and was significant, Wilk’s lambda = .820, $\chi^2(6) = 33.8, p < .001$, indicating that the function of predictors significantly differentiated between the group of those respondents who tweet at brands and the group who does not. The eigenvalue was .22 and the canonical correlation was .43. Tweet vs. no tweet was found to account for 18.1% of function variance. Hair et al. (1998) suggested that loadings with a value of at least .30 can be considered ‘substantial’ (p. 294). Correlation coefficients (see Table 3) revealed that the variables of the total number of brands they follow, brand relationship quality, Twitter usage length, brand attitude, and modeling are most associated with the function. Reinforcement was not found to be a substantial predictor of the function. Thus, all hypotheses were supported except H1b. Original classification results revealed that 79.8% of the no Tweet subjects were correctly classified, while 55.6% of the Tweet people were correctly classified. From the overall sample, 68.6% were correctly classified. Cross-validation derived 64.8% accuracy for the total sample. Group means for the function indicated that those who tweet at brands had a function mean of .503 and those who do not tweet at brands had a mean of -.433. These results suggest that Twitter users with more positive brand attitudes, high relationship quality, those engaging in modeling, Twitter usage, and a high number of brands are likely to be classified as frequent members of the tweeting group.

5.3.2. Retweet vs. no retweet of brand links

The analysis revealed that the function was significant, Wilk’s lambda = .816, $\chi^2(6) = 34.5, p < .001$, suggesting that the function of predictors significantly differentiated the two groups (retweet vs. no retweet). The eigenvalue was .22 and the canonical correlation was .43. Just over 18% of the function variability was explained by the retweet classification. As shown in Table 3, the variables that discriminate the retweet groups most strongly are: Twitter usage length (.72), brand attitude (.53), total number of brands followed (.50), modeling (.48), and brand relationship quality (.44). Similar to the findings for the tweeting group, all hypotheses were supported except H1b. Original classification results revealed that 74.1% of the no retweet subjects were correctly classified, while 62.2% of the retweet people were correctly classified. For the overall sample, 68.0% were correctly classified. Cross-validation derived 65.7% accuracy for the total sample. Group means for the function indicated that those who retweet had a function mean of .459 and those who do not retweet at brands had a mean of -.486. In line with the previous findings on the groups who tweeted or did not tweet, these results suggest that Twitter users with positive brand attitudes, high relationship quality, engage in modeling, high Twitter usage, and the total number of brands followed are likely to be classified as consumers who retweet.

To further confirm the results of discriminant analyses, independent samples t-tests were conducted. As shown in Table 2, the results suggest that individuals in the tweet group indicated higher scores on brand attitude, brand relationship quality, modeling, the total number of following brands, and Twitter usage length than did their no-tweet counterparts ($p < .01$). However, the difference between the tweet ($M = 3.0$) and no tweet ($M = 2.8$) groups in terms of reinforcement was not statistically significant ($p = .17$). The same mean scores differences pattern was found between the retweet and no-retweet groups.

6. Discussion and implications

Guided by a consumer socialization framework, the current study sought to examine the role of brand followers’ Twitter communication patterns and use in predicting engagement with brands on Twitter in order to understand the socialization process through social media. Research has shown many factors which facilitate eWOM and, while no single variable is able to predict when marketing messages will be shared or go viral, developing means to identify influencers (those likely to engage with brands through eWOM behaviors) is a necessary first step in effective eWOM Twitter campaigns. Through a survey of college students’ self-reported behaviors with Twitter, the current study was able to predict whether Twitter users would tweet at a brand and whether Twitter users would retweet brand mentions.

6.1. Theoretical implications

Using six relatively accessible variables, the current study identified Twitter users who are likely to engage with brands by tweeting at those brands or sharing brand tweets.

One would expect variables such as attitudes toward brands on Twitter and perceived utility and quality of the relationships with brands on Twitter to be paramount to further participation with other brands. As expected, these were significant in the prediction of the users’ reported behaviors, as were users’ perceptions of their peers’ Twitter behavior.

Specifically, the present research makes a significant contribution to the literature on eWOM by incorporating peer communication, brand-related factors, and usage into a conceptual framework. First, we successfully applied the concept of peer communication to the Twitter context and demonstrated that Twitter is a new socialization agent that facilitates the eWOM process because peers are viewed as a reliable source of information. Consistent with findings on the sharing information in other social networks, peer modeling (i.e., imitating a peer’s behaviors regarding eWOM on Twitter) is a particularly important factor that predicted Twitter action. Given the social and community nature of Twitter, users observe attitudes and behaviors through tweets and retweets sent by their peers and thus engage in eWOM behaviors. Thus, peer communication is an important theoretical construct that helps explain brand-related information sharing in Twitter. The foremost contribution of this finding is that it offers useful knowledge for researchers to understand the underlying mechanism of eWOM communication via social networked environments.

Second, while past research emphasizes the importance of brand attitude and brand relationship quality in the context of consumer-brand relationship, limited research has examined these two factors in relation to eWOM. Commercial brands hold symbolic meanings that are socially constructed (Csikszentmihalyi and Rochberg-Halton 1981), and individual consumers enhance their self-concepts by associating themselves with brands in a form of relationship. Our findings provide empirical support that Twitter users with a more favorable attitude toward the brands they follow and a higher perceived relationship quality with those brands (i.e., those who trust their brands) are more likely to be active participants in the creation and spread of brand-related information on Twitter. That is, engaging in eWOM about brands that they like and they have relationships with can be considered as a means of connecting the self and the brand. Thus, when the brand is highly associated with the self (i.e., positive brand attitude and high
relationship quality), individual consumers' willingness to engage in eWOM is greater (Kim et al. 2014).

Lastly, most influential in predicting tweet/retweet behaviors were simply the number of brands followed and the length of time respondents had been using Twitter. The same pattern of responses also predicted retweet behavior indicating that brand engagement occurs both inward toward the brands (tweeting at brands) and outward toward influencers' followers (retweeting brand information). Our findings offer additional support for a number of recent studies (e.g., Kim et al. 2014) suggesting that more activities on Twitter (e.g., the number of followers, usage frequency, the number of postings) lead to a greater influence exerted by members on eWOM communication.

6.2. Managerial implications

The findings of this study provided some meaningful managerial insights for marketing and social media practitioners. By examining the degree to which these users model their behaviors on others, their attitude toward the brands, their perception of relationship quality, their degree of Twitter usage, and the number of brands followed, those who engage in eWOM can be differentiated from those Twitter users who do not engage in eWOM. Making such a distinction allows for marketing and social media professionals to discover the most likely prospects for brand engagement. Not only are these prospective users the most likely to engage with the brands themselves and most likely to embody the behaviors sought after by marketers; these are the consumers who are likely to influence others as role-models in brand tweeting and retweeting. As Chu and Kim (2011) suggest, the essence of eWOM marketing in social media is to identify the potential influencers and encourage them to spread positive eWOM communication about brands. Thus, marketing messages that incorporate peer communication can be used to promote eWOM behaviors in Twitter.

Given the importance of the number of brands followed and the length of time using Twitter as the identifying characteristics of these opinion leaders, marketing and social media professionals should encourage long-term Twitter users to follow many brands in the hopes that brand information in the aggregate will provide these users with content that they deem important enough to retweet. In this study, we assume that those who follow many brands voluntarily follow the brands they like. However, by encouraging Twitter users to follow brands they are interested in, they may tweet/retweet more about the brands they follow due to the increasing exposure to marketing messages those brands send. Through multiple brand interactions, retweeters likely develop a pattern of use and response with Twitter. Such Twitter interactions become self-rewarding and self-replicating, maintaining and reinforcing the desire to continue with greater brand engagement.

In addition, it is important for marketers and brand managers to encourage @brand tweets and brand retweets as a means to model and develop future Twitter opinion leaders. Recall that the significant predictor of an active tweeter/retweeter is the perception of peers’ brand engagement using Twitter. Therefore, these users serve as role-models to influence such perceptions. Such a Twitter strategy might include actively promoting the tweets of brand followers to give more visibility to brand promotion in general, which should ultimately encourage users to follow a greater number of brands.

6.3. Limitations and future research

Although this study represents the first academic attempt to examine eWOM in the context of Twitter by employing discriminant analyses, it is not without its limitations. First, this study used self-reported data collected by an online survey. Self-reported data may not be accurate and reliable, due to the potential response error. While self-reported surveys are a popular research method in advertising and marketing, future research could examine Twitter usage via content analysis (e.g., count the number of followers participants have and the number of people they follow) to increase the reliability and validity of the study. It is also important to note that this is a survey study, thus, this study is not causal. Readers should keep in mind that no causal relationship was identified through the study results. Follow-up research could conduct experiments to explore the potential causal relationship between Twitter usage (e.g., the number of brands a Twitter user follows) and engagement in eWOM behaviors.

Second, while brand attitude was found to be an important variable that classifies eWOM group membership in Twitter (positive brand attitude leads to eWOM behavior), some research findings suggest that consumers are more likely to share negative eWOM when their attitudes toward the brand are unfavorable. Along this line, it is also possible that those who serve as role-models to others, who most heavily use Twitter and follow many brands, are likely to tweet negative information about brands they follow. This possible scenario may affect the implications of the results. For example, social media marketers should constantly monitor all brand-related tweets and retweets and identify those brand followers who tend to tweet negative information about brands. By reaching out directly to those who share negative information on Twitter and understanding their concerns about brands, marketers can do a better job of satisfying consumers’ needs and promoting favorable eWOM on Twitter. Given that Twitter provides an easy way for consumer complaints, future research could examine how the identified discriminators are related to specific positive or negative eWOM on the site.

Third, Taylor et al. (2012) argue that consumers engage in WOM to construct their self-concepts and found that the self-expressiveness of online ads lead to increased likelihood of sharing those ads. Similarly, Angelis et al. (2012) examined

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean¹</th>
<th>Structure coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tweet N = 81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of brands</td>
<td>18.1</td>
<td>.64</td>
</tr>
<tr>
<td>Twitter usage length</td>
<td>21.3</td>
<td>.48</td>
</tr>
<tr>
<td>Brand attitude</td>
<td>6.1</td>
<td>.47</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>4.5</td>
<td>.61</td>
</tr>
<tr>
<td>Modeling</td>
<td>5.2</td>
<td>.46</td>
</tr>
<tr>
<td>Reinforcement</td>
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<td>.17</td>
</tr>
<tr>
<td>No tweet N = 94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of brands</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Twitter usage length</td>
<td>15.7</td>
<td></td>
</tr>
<tr>
<td>Brand attitude</td>
<td>5.6</td>
<td></td>
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<tr>
<td>Relationship Quality</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Modeling</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Reinforcement</td>
<td>2.8</td>
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</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean¹</th>
<th>Structure coefficient</th>
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<tbody>
<tr>
<td>Retweet N = 90</td>
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<td></td>
</tr>
<tr>
<td>Total number of brands</td>
<td>16.5</td>
<td>.50</td>
</tr>
<tr>
<td>Twitter usage length</td>
<td>22.3</td>
<td>.72</td>
</tr>
<tr>
<td>Brand attitude</td>
<td>6.1</td>
<td>.53</td>
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<td>Relationship Quality</td>
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<td>.44</td>
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<tr>
<td>Modeling</td>
<td>5.2</td>
<td>.48</td>
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<tr>
<td>Reinforcement</td>
<td>3.0</td>
<td>.18</td>
</tr>
<tr>
<td>No retweet N = 85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Standard deviations are in parenthesis.
* Mean difference was significant at .01.
eWOM valence and compared the generation of WOM with the transmission of WOM. Angelis et al. (2012) found that self-enhancement is a unique motive that explains when positive versus negative WOM is more likely to occur. Future research could examine the effect of self-enhancement on eWOM behaviors in Twitter and explore whether this motive shapes Twitter brand followers’ tweet/no tweet and retweet/no retweet patterns.

In addition, it is important to note that people who retweet frequently might be considered as spammers and will actually not be trusted. Future research should take the content of retweets into consideration and investigate consumers’ perception of those retweets. Regardless of if consumers trust those who retweet a lot or not, identifying those most engaged with brands is the first and most important step in developing a successful Twitter campaign.

7. Conclusion

In conclusion, the main research goal of this study is to demonstrate that Twitter is a socialization agent that facilitates eWOM. This study has shown that the modeling learning processes of peer communication through social media discriminates whether Twitter brand followers engage in eWOM behaviors. This result indicates that brand followers’ eWOM behaviors on Twitter are influenced by their peers through unspoken modeling communication. Brand followers are likely to engage in peer communication about brands on social media by observing attitudes and behaviors through tweets and retweets sent by their peers. This finding supports our argument that Twitter represents a new form of socialization agent that has an impact on consumers’ social media behaviors, and thus on brand engagement.

References


