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Theo Araujo\*

# The impact of sharing brand messages: How message, sender and receiver characteristics influence brand attitudes and information diffusion on Social Networking Sites

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**Abstract:** Social Networking Sites (SNSs) not only enable users to read or create content about brands, but also to easily pass along this content using information diffusion mechanisms such as retweeting or sharing. While these capabilities can be optimal for viral marketing, little is known, however, about how reading brand messages passed along by SNS contacts influences online brand communication outcomes. Results of a survey with active SNS users indicate that (1) message evaluation, (2) the relationship with the sender, and (3) the receiver's opinion leadership and opinion-seeking levels influence not only the receiver's intention to pass along the message further, but also his or her attitude towards the brand. The implications of these findings are discussed, including how these capabilities brought on by SNSs change the brand-consumer relationship online.

**Keywords:** Social Networking Sites, information diffusion, online opinion leadership, retweeting, viral marketing

## 1 Introduction

The emergence of social media in general, and of Social Networking Sites (SNSs) such as Facebook and Twitter in particular, has drastically changed the relationship between consumers and brands (Gensler, Völckner, Liu-Thompkins, and Wiertz, 2013; Hutton and Fosdick, 2011). Brands, on the one hand, now establish relationships with consumers that go beyond advertising by, for example, stimulating users to follow brand activities and to share brand messages on SNSs (Araujo and Neijens, 2012; Kwon and Sung, 2011). SNS users, on the other hand, now have access to platforms where they can communicate, publish content,

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and follow updates from their friends as well as from their favorite brands. Users can then not only consume brand-related information, but also contribute to and create their own brand-related content (Muntinga, Moorman, and Smit, 2011). SNSs also enable users to easily pass along messages created by others by retweeting the messages on Twitter or sharing them on Facebook. This mechanism for information diffusion is particularly relevant for brands, as consumers can help extend the reach of the brand message beyond the community of users already receiving updates from the brand (Araujo, Neijens, and Vliegenthart, 2015; Jansen, Zhang, Sobel, and Chowdury, 2009).

Academic research has begun to explore what influences this type of information diffusion, focusing on how source, message, or network characteristics influence pass-along behavior for general (i.e., not brand-specific) content on SNSs (Bakshy, Hofman, Mason, and Watts, 2011; Liu, Liu, and Li, 2012; Petrovic, Osborne, and Lavrenko, 2011; Suh, Hong, Pirollo, and Chi, 2010). Research specifically investigating the diffusion of brand content on SNSs has explored how the presence of information and emotion in brand messages (Araujo et al., 2015), or positive attitudes towards the brand (Kim, Sung, and Kang, 2014) stimulate pass-along behavior. This line of research has generally focused on the relationship between the SNS user who has written the message, be it a person or a brand, and the follower who has read that message and may decide to retweet it or share it.

Some studies also investigate the effects of receiving brand-related information on brand communication outcomes. Baker, Donthu and Kumar (2016) explore how positive, negative, mixed and neutral word-of-mouth (WOM) influence purchase intentions and pass-along behavior (which they call retransmission intentions) both online and offline, and conclude that positive WOM has “the greatest absolute effect for retransmission intentions” (p. 235), while purchase intentions seem to be influenced the most by negative WOM. Specifically for SNSs, research has focused, for example, on the influence of celebrities’ tweets on purchase intentions (Jin and Phua, 2014), on the persuasiveness of viral campaigns with online games (Okazaki and Yagüe, 2012; van Noort, Antheunis, and van Reijmersdal, 2012), the influence of user generated content (UGC) associated with advertisements (Knoll and Schramm, 2015), or compared the effects of WOM with traditional marketing campaigns (Trusov, Bucklin, and Pauwels, 2009). While these studies provide important findings for online brand communication on SNSs, a critical gap still exists in the literature. Research is yet to investigate the effects of receiving regular messages (i.e., not viral campaigns or advertisements) created by brands (instead of other users) via retweeting or sharing. This is an important distinction not only because the type or source of the message may be different, but also because of how the information is passed along. Retweeting

a brand message on Twitter or sharing it on Facebook generally means that the user is passing it along to his or her friends in the network at once in a mostly public manner, something arguably different from sending the message only to a selected group of contacts for an e-mail, or viral campaign.

Investigating brand content information diffusion via these capabilities brought on by SNSs is a particularly pressing topic for several reasons. Firstly, SNSs have achieved extremely high levels of usage across the world. Secondly, although SNS users mention brands or pass along brand messages frequently (Jansen et al., 2009; Nagy and Midha, 2014), research about the actual effects of this behavior is still scarce. Thirdly, and perhaps more importantly, SNSs have arguably lowered the complexity of passing along messages to a network of friends or contacts in a much more public and much less targeted manner than e-mail or viral campaigns. This calls for a deeper understanding of how these capabilities brought on by SNSs influence the outcomes of the online brand communication process.

In order to help fill this gap in communication research, this study evaluates the influence of three aspects of the communication process: the message, the sender, and the receiver. In order to provide a more holistic perspective of the phenomenon, this study, based on earlier research, prioritized important dimensions of each of these three aspects. More specifically, when it comes to the message, this study extends earlier research on viral advertising and tests whether perceiving the brand message as entertaining or informative influences the receiver's willingness to pass it along further, and also how he or she perceives the brand. When it comes to the sender, this study investigates the nature of the relationship between the person who shared or retweeted the brand content in the first place, and the receiver of the message. Finally, this study evaluates how the receiver's own levels of opinion leadership and engagement in consumer-to-consumer eWOM are associated with the willingness to pass along brand-generated messages, as well as with the formation of brand attitudes.

## 2 Theoretical background

Online communication has brought drastic changes to how brands and consumers interact, as evidenced, for example, by the increased importance of blogs (Kozinets, De Valck, Wojnicki, and Wilner, 2010), online consumer reviews (Willemssen, Neijens, Bronner, and de Ridder, 2011), online forums (J. Brown, Broderick, and Lee, 2007), and by the emergence of webcare as an important tool for brand reputation management (van Noort and Willemssen, 2012). With these changes,

discussions that consumers may have had with friends or acquaintances about brands and products in the past – that is, offline word-of-mouth – also take place in online environments. Brands are frequently mentioned, for example, in Twitter messages (Jansen et al., 2009; Nagy and Midha, 2014), and a large proportion of users discuss their experiences with products by means of social media (Nielsen, 2012).

SNSs provide an additional set of capabilities to enable eWOM and participation online. A case in point is retweeting, a mechanism for information diffusion that has emerged almost spontaneously on Twitter, enabling users to pass along messages written by others. Initially, users would copy a message from someone else themselves and manually indicate that it was a retweet (Boyd, Golder, and Lotan, 2010). Twitter then included this capability directly in its interface, making it not only simpler and more structured to use, but also prominently displaying how many retweets each message had received on the SNS. Facebook added a similar capability, the share option, soon afterward. These capabilities made it much more convenient for SNS users to pass along messages created by someone else, including messages created by brands. Another important aspect for brands is that messages passed along by means of these capabilities appear in the receivers' timelines as regular messages (i.e., not advertisements), and are associated with the name of the person in the receivers' network that shared or retweeted the message.

This study draws upon earlier research on information diffusion and online brand communication to investigate the consequences of reading a brand message passed along by someone else on SNSs via sharing or retweeting. Findings from eWOM research, which explores why consumers engage in consumer-to-consumer discussions about brands online, as well as from viral advertising research, are briefly reviewed below in order to create hypotheses for the effects of message, receiver, and sender characteristics. These effects are investigated for two outcomes: (1) the receiver's willingness to pass the message along further, thus continuing the information diffusion flow and potentially helping increase exposure to, and awareness of, the brand by additional SNS users (the network of contacts of the receiver), and (2) the influence on the receiver's brand attitudes by the receiver? (how the receiver influences the receiver?), that is, her or his overall evaluation of the brand, an important dimension of customer-based brand equity (Keller, 1993).

## 2.1 The influence of the message

Earlier research highlights the importance of utilitarian and hedonic motivations for engaging in WOM (Mikalef, Pateli, and Giannakos, 2013) and for other brand-related interactions, such as the shopping experience (Babin, Darden, and Griffin, 1994). Utilitarian motivations are more results-oriented, rational, and therefore associated with information and utility, while hedonic motivations are more spontaneous in nature, and associated with entertainment, fun, and pleasure (Babin et al., 1994). Viral advertising and eWOM research uses these two motivations to explain why consumers engage in brand-related discussions and pass along messages created by other consumers or by brands.

The desire to help and inform others is an important motivation for eWOM (Bronner and de Hoog, 2010; Hennig-Thurau, Gwinner, Walsh, and Gremler, 2004; Okazaki, 2008, 2009), and is usually associated with the utilitarian dimension. People who desire to help others tend to prioritize messages that are useful and rich in information (Chiu, Hsieh, Kao, and Lee, 2007), the more so when they perceive themselves able to judge the usefulness of the message to the receiver (Huang, Lin, and Lin, 2009). The influence of utilitarian motivations and the level of information in messages are also seen on Twitter, where brand messages rich in information cues, such as product information and links to the brand website, are more likely to be retweeted (Araujo et al., 2015).

The utilitarian dimension is not the only motivation for eWOM or for passing along brand messages: SNS users also engage in eWOM because exchanging information is enjoyable, or fun (Okazaki, 2008, 2009). Viral advertising frequently resorts to messages that are entertaining or that trigger emotional responses, with the assumption that the content needs to be somehow perceived as extraordinary to be passed along (Porter and Golan, 2006). Several studies validate this assumption and show that consumers tend to pass along e-mails or online content for hedonic reasons (Chiu et al., 2007; Phelps, Lewis, Mobilio, Perry, and Raman, 2004), particularly when these messages trigger emotional responses (Berger and Milkman, 2012; Dobebe, Lindgreen, Beverland, Vanhamme, and van Wijk, 2007; Eckler and Bolls, 2011). Research also indicates that the presence of emotional cues on brand messages increases the likelihood that informational brand messages will be passed along on Twitter (Araujo et al., 2015).

The findings above indicate a strong link between how the receiver evaluates a brand message and his or her willingness to pass it along further, leading to the following hypotheses:

H1: The more informative receivers consider a message to be, the more likely they will be to pass it along.

H2: The more entertaining receivers consider a message to be, the more likely they will be to pass it along.

As indicated by H1 and H2, brand messages perceived as informative and entertaining are expected to lead to a greater willingness to pass along these messages further. Marketing communication research also establishes that attitude towards an advertisement, or how an advertisement is perceived, influences attitudes towards the brand (MacKenzie, Lutz, and Belch, 1986; MacInnis and Jaworski, 1989). The same can be expected with regard to brand messages on SNSs. In the context of this study, the evaluation of the brand message, that is, its level of information and entertainment, will contribute to the attitude that the receiver has toward the brand. Moreover, because the message is originally created by the brand on SNS, thus being positive about the brand, we expect that, in general, the effect of message evaluations on brand attitudes will be positive. This leads to H3 and H4:

H3: The more informative the receiver considers a brand message to be, the more positive her or his attitude will be toward the brand.

H4: The more entertaining the receiver considers a brand message to be, the more positive her or his attitude will be toward the brand.

## 2.2 The influence of the sender

Research based on social influence theory already indicates that not only the relationship between the consumer and the brand is important for brand-related outcomes, but also the context in which this relationship takes place. More specifically, Knoll and Schramm (2015) have demonstrated that UGC can influence the purchase and recommendation intentions of a product being advertised, especially when the receiver belongs to the same group as the creator of the UGC. Innovation diffusion research also suggests that the relationship between the people taking part in WOM processes plays an important role in determining whether innovations or new ideas will be accepted or not (Rogers, 2003). One of the key concepts in this line of research is the strength of the relationship between the sender and the receiver of the message. The strength of this relationship, or tie strength, is defined as the combination of the emotional intensity, time spent, and intimacy between two people, and has been associated, for example, with the degree of overlap between friendship networks (Granovetter, 1973).

Earlier research has established that, in general, strong ties have more influence on decision-making than weak ties (J. J. Brown and Reingen, 1987), and this type of influence is also seen when it comes to positive WOM and purchase intentions (Baker et al., 2016). Research on SNSs, for example, indicates that strong ties influence the adoption of new behavior (Bakshy, Rosenn, Marlow, and Adamic, 2012) as well as the persuasiveness of viral campaigns (van Noort et al., 2012). This can be explained not only by how consumers see close friends and family as more credible and trustworthy than other sources in general, but also by the expectation that messages sent by strong ties are more relevant and targeted to their needs (Chiu et al., 2007; Phelps et al., 2004; van Noort et al., 2012). When it comes to influencing diffusion of WOM, however, tie strength had a less relevant role (Baker et al., 2016).

Research also indicates that weak ties contribute to information diffusion by enabling novel information to circulate among different groups (J. J. Brown and Reingen, 1987). This is related to the concept of information brokerage, where certain people – information brokers – can enable information to flow between groups of people that would otherwise be disconnected (Burt, 2000). Information brokers can enable information flow not because of their own personal characteristics or interests (such as opinion leaders, as discussed below, or marketing mavens, c.f., Feick and Price, 1987), but primarily because of their position in the network, that is, having contacts across groups that would otherwise be disconnected, and therefore not have access to similar information. Studies on Twitter indicate that information brokers are responsible for most of the diffusion of information (Bakshy et al., 2011), including the diffusion of brand messages via retweets (Araujo, Neijens, and Vliegenthart, 2017).

Consumers can receive brand messages not only from close friends or information brokers, but also from celebrities or public figures. SNSs are frequently used by celebrities to communicate with their fan bases (Marwick and Boyd, 2011). When celebrities discuss brands – for example, on Twitter – consumers who identify with them display stronger product involvement and buying intention (Jin and Phua, 2014). Moreover, highly influential users – including celebrities and public figures – have been found to stimulate their followers to pass along messages created by brands when they retweet them or are mentioned in these messages (Araujo et al., 2017).

The findings above indicate that the type of sender should influence the willingness to pass along the brand message further. Given findings already available on Twitter indicating that information brokers, due to their ability to bring novel information into a group, as well as celebrities are able to stimulate information diffusion via retweets, this study hypothesizes that:



H5: Receivers will be more likely to pass along the brand message further when they receive it from an information broker or from a celebrity (as compared to receiving it from close friends).

The findings from earlier SNS-related research discussed above also provide clear indications that (a) the stronger the tie, the stronger the persuasive influence of the sender (van Noort et al., 2012) and (b) that celebrities are able to positively influence product involvement and willingness to purchase products when they are associated with brands on SNSs (Jin and Phua, 2014). These findings are aligned with the notion that tie strength is associated with the level of eWOM persuasiveness (Babic Rosario, Sotgiu, de Valck, and Bijmolt, 2016). Moreover, when it comes to positive WOM, research clearly indicates that the strength of the tie influences purchase intentions (which can be seen as related to brand attitudes), even if it does not influence pass-along behavior (Baker et al., 2016). We expect similar (positive) effects of tie strength influencing brand attitudes when passing along messages created by the brand on SNS, and therefore propose the following hypothesis:

H6: Receivers will have a more positive brand attitude when they receive the brand message from a close friend than from other types of senders (information brokers or celebrities).

### 2.3 The influence of the receiver

Not everyone is equally likely to be influenced by WOM, or to initiate it. Earlier research on WOM (Flynn, Goldsmith, and Eastman, 1996) makes a distinction between opinion leaders and opinion seekers. On the one hand, opinion leaders influence others not only by their central position in communication networks, but also by their expertise on the topic (Brooks, 1957) and their standing in the community (Katz, 1957). In online environments, they demonstrate higher levels of innovativeness and consider themselves to be more knowledgeable than non-leaders (Lyons and Henderson, 2005). On the other hand, opinion seekers are the ones who frequently look towards others to make a decision (Flynn et al., 1996). Research indicates that opinion seekers are more likely to be affected by WOM, especially when they perceive a certain decision as being likely to involve a higher risk (Arndt, 1967).

Opinion leaders and opinion seekers are not mutually exclusive categories, as opinion leaders are also influenced by others (Myers and Robertson, 1972). When it comes to eWOM, opinion leaders are more likely to participate in eWOM groups (Okazaki, 2009), and both opinion seekers and opinion leaders are positively

associated with processes of diffusion of information online (Sun, Youn, Wu, and Kuntaraporn, 2006). Given these findings, opinion leaders would be expected to engage in pass-along behavior of brand messages, and opinion seekers would be expected to be more susceptible to influence in brand attitudes when receiving these messages. This leads to the following hypotheses:

H7: The receiver's online opinion leadership levels will be positively related to his or her likelihood of passing along brand messages via retweeting or sharing.

H8: The receiver's online opinion-seeking levels will be positively related to his or her brand attitudes when receiving brand messages passed along via retweeting or sharing.

## 3 Methods

### 3.1 Sample

Active social media users, who were members of a research panel, participated in the study. A total of 410 respondents completed the questionnaire. The respondents' mean age was 39.07 years ( $SD = 13.95$ ), and 51% were females. Most respondents were active SNS users, accessing Facebook and Twitter at least once a week (Facebook: 89%, Twitter: 62%). Also, 48% of the participants indicated that they shared brand messages on Facebook at least once a week, while 40% retweeted brand content on Twitter as often.

### 3.2 Procedure

Respondents participated in an online survey in which they were presented fictitious brand messages, and had to evaluate (a) how likely would they be to pass a particular message along to their friends on the SNS via retweets or sharing and (b) how informative and entertaining they considered the message to be. In order to provide more general results, each respondent evaluated two sets of three messages: one set in which participants were asked to consider that the message was posted by a brand they knew and liked, and another set for a brand they did not know. For each set, participants evaluated three different messages. Each message was shown together with information on who had retweeted or shared that message (sender). The respondents were instructed to consider the sender to be (1) a celebrity or public figure that they admired, (2) a very close friend, or (3) an acquaintance, but not a friend (used as a proxy for information

broker). The type of sender was randomly associated with each message, and shown in similar proportions (of the messages shown to each respondent, 33% were said to be passed along by a celebrity, 33% by a close friend and 33% by an acquaintance).

The fictitious brand messages were designed to vary in levels of information and entertainment (e.g., “On this Valentine’s day, set your romance on fire with our new fragrance. #LOVE”, “Check out our new cameras: They have batteries that last a month, and store 3x more pictures than other digital cameras”), and the evaluation used in the analysis was the one made by the respondent, given the level of subjectivity of this assessment.

### 3.3 Measures

#### 3.3.1 Willingness to pass along the brand message

Participants rated the extent to which they agreed with the statement that they would pass along the message in question on Twitter or Facebook via retweeting or sharing. The responses were given on a 7-point scale, ranging from “Strongly disagree” to “Strongly agree” ( $M = 4.07$ ,  $SD = 1.93$ ).

#### 3.3.2 Brand attitude

Respondents evaluated their attitude towards each of the brands that had originally written the messages by responding to three questions measuring brand affect (Sengupta and Johar, 2002). The responses were on a 7-point scale (Cronbach’s  $\alpha = 0.95$ ,  $M = 4.51$ ,  $SD = 1.61$ ).

#### 3.3.3 Message evaluation

Each respondent evaluated each message for its entertainment and informational levels. Starting from an earlier scale measuring hedonic and utilitarian consumer attitudes (Voss, Spangenberg, and Grohmann, 2003), a specific measure was developed to evaluate the entertainment (hedonic) and informational (utilitarian) levels of a message. For the entertainment level, respondents rated the extent to which they agreed that the message was fun, exciting and entertaining on a 7-point scale ranging from “Strongly disagree” to “Strongly agree” (Cronbach’s  $\alpha = 0.95$ ,  $M = 4.28$ ,  $SD = 1.65$ ). For the informational level, respondents evaluated

the extent to which the message was practical, informative, and helpful also on a 7-point scale (Cronbach's  $\alpha = 0.93$ ,  $M = 4.78$ ,  $SD = 1.54$ ). Confirmatory Factor Analysis was run to validate the existence of two latent variables in the message evaluations – entertainment and informational levels –, considering the adaptations made to the original scale. Using guidelines for identification of models with measurement errors (Kline, 2011) and allowing for covariance between error terms, the model indicated good fit (RMSEA = 0.045, range 0.032 – 0.060, CFI = 0.998, SRMR = 0.006). The predicted latent variables were used in the analysis.

### 3.3.4 Online opinion leadership and opinion-seeking levels

An adapted version of the scale from Sun et al. (2006) was used to measure online opinion leadership and opinion-seeking levels. The questions were also asked on a 7-point scale ranging from “Strongly disagree” to “Strongly agree”, with online opinion leadership (Cronbach's  $\alpha = 0.94$ ,  $M = 4.47$ ,  $SD = 1.45$ ) and online opinion seeking (Cronbach's  $\alpha = 0.88$ ,  $M = 4.70$ ,  $SD = 1.21$ ) being measured using eight questions each. Considering each scale was also adapted, Confirmatory Factor Analysis was run. Models correcting for covariance between error terms indicated good fit for both opinion leadership (RMSEA = 0.036, range 0.000 to 0.063, CFI = 0.997, SRMR = 0.014) and opinion seeking (RMSEA = 0.038, range 0.000 to 0.071, CFI = 0.996, SRMR = 0.016). The predicted latent variables were used in the analysis.

### 3.3.5 Control variables

Age and gender were included in the analysis as control variables, as earlier research shows that they influence SNS-related behavior (Amichai-Hamburger and Vinitzky, 2010; Hollenbaugh and Ferris, 2014). Another control variable was whether the message indicated that the brand was known or unknown to the respondent (50% of the messages shown to each respondent were associated with a known brand, and 50% with an unknown brand).

## 3.4 Analytical strategy

Multilevel regression models for each dependent variable were built to test the hypotheses and answer the research question of this study. The unit of analysis was each message evaluation done by each respondent ( $n = 2460$ ). The data

were analyzed using multilevel regression with cross-classified models, considering that each respondent ( $n = 410$ ) evaluated more than one message ( $n = 6$ ). Each model had two contextual levels: messages (6 groups, one per message) and respondents (410 groups, one per respondent). This strategy ensured that any unexplained variance associated with internal characteristics of the respondent or of the message was isolated at the contextual level (Fielding and Goldstein, 2006; Goldstein, 1994). Finally, a new set of models was created with the standardized version of the variables to allow for the comparison of their influence on the dependent variables. The inclusion of binary variables (e.g., type of sender, gender), however, posed a challenge to the standardization, as standardized versions of binary variables cannot be directly interpreted. We therefore standardized all non-binary variables by dividing the inputs by two standard deviations, in line with recommendations from the literature (Gelman, 2008). This strategy ensures that the standardized variables have a standard deviation of 0.5, which leaves them in a scale that is directly comparable with the (unstandardized) binary variables.

## 4 Results

The results, shown in Table 1, indicate that message evaluation influences the willingness to participate in pass-along behavior. This provides support to both H1 and H2. In line with H1, the more informational receivers consider brand messages to be, the more likely they are to pass them along, with each increase in the level of message evaluation raising the willingness to pass along the brand message by 0.35. In line with H2, the more entertaining respondents perceive brand messages to be, the more likely they are to pass them along, with each increase in entertainment levels also increasing pass-along behavior by 0.52.

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<sup>1</sup> Given that passing along a brand message (by sharing or retweeting) can be considered a binary decision (i.e., the SNS user decides whether to pass the message along or not), and given that 22.44% of the responses were on the scale midpoint (4, on a 7-point scale), we conducted additional analyses with the willingness to pass along measure transformed into a binary variable. We created three cross-classified multilevel logit models, with the binary variable constructed with varying threshold levels for considering that a respondent would pass the message along (model 1: five and above, model 2: six and above, and model 3: only seven). The three models show results largely consistent with Table 1 when it comes to direction and statistical significance, only differing for control variables and, in the case of model 1 (five and above), with the effect of information brokers (compared to close friends) being significant.

The results also provide support to H3 and H4, which associated message evaluation with influence on brand attitudes. As proposed by H3, the more informative receivers perceive the message to be, the better their attitude towards the brand, with each increase in informational level improving brand attitudes by 0.48. Likewise, and as proposed by H4, perceived entertainment levels of a message also improve brand attitudes, by 0.37.

**Table 1:** Results of cross-classified multilevel models (n = 2460).

	Willingness to pass along <sup>1</sup>		Brand attitude	
	b	SE	b	SE
<b>Message</b>				
Information level	0.35**	0.03	0.48**	0.02
Entertainment level	0.52**	0.03	0.37**	0.02
<b>Sender</b>				
Acquaintance	-0.08	0.04	(base category)	
Celebrity	-0.03	0.04	-0.06	0.03
Close friend	(base category)		0.13**	0.03
<b>Receiver</b>				
Opinion leadership level	0.2**	0.04	0.05*	0.03
Opinion-seeking level	0.03	0.07	0.17**	0.05
<b>Control variables</b>				
Age	0	0	0	0
Female	-0.2*	0.09	-0.13*	0.06
Known brand	0.06	0.08	-0.01	0.06
Intercept	4.1	0.14	4.54	0.1
<b>Contextual level variance</b>				
<b>Variance</b>				
Message group	0.01	0.01	0.004	0.003
Respondent	0.62	0.05	0.26	0.02
Residual	0.73	0.02	0.45	0.01
<b>Intraclass correlation</b>				
Message group	0.01		0.02	
Respondent	0.63		0.58	
Residual	0.36		0.40	
-2*Log likelihood	6960.29		5639.25	

\*\*p<.01; \*p<.05

The results do not show significant differences between the influences of types of sender and willingness to participate in pass-along behavior. Therefore, this does not provide support to H5, which indicated that receiving brand messages passed along by information brokers or celebrities would lead to a higher likelihood of pass-along behavior than when the messages were passed along by close friends. The type of sender, however, influences brand attitudes positively in the case of close friends, but does not show a significant effect in the case of celebrities. This provides partial support to H6.

When it comes to the receiver, both H7 and H8 are supported. Receivers that have higher opinion-leadership levels and participate more often in eWOM to provide recommendations and help others are also more likely to pass along brand messages on SNSs. This provides support to H7. Receivers with higher online opinion-seeking levels, who rely on eWOM to take decisions, displayed higher brand attitudes after reading a brand message passed along by others than receivers with lower levels of online opinion seeking, which supports H8.

It remains to be seen, however, how the influence of each variable compares to the others. The models with the standardized versions of the variables, shown in Table 2, enable this comparison, and indicate that message evaluation has the strongest influence over both willingness to pass along and brand attitudes when compared to the sender and to receiver characteristics. In particular, the perceived entertainment level of a message has a stronger influence than the informational level on willingness to pass the message along. When it comes to brand attitudes, however, the importance is reversed: The perceived informational level of a message has a more influence on brand attitudes compared to the perceived entertainment level.

Receiver characteristics are the second most important group both for willingness to pass along and for brand attitudes, as indicated by the standardized results from opinion leadership and opinion-seeking levels. Finally, sender characteristics, in particular, receiving the message from a close friend, only have a significant influence on brand attitudes. This influence, however, is smaller than message and receiver characteristics.

**Table 2:** Results of cross-classified multilevel models with standardized variables (n = 2460).

	Willingness to pass along		Brand attitude	
	b	SE	b	SE
<b>Message</b>				
Informational level	0.99**	0.08	1.37**	0.06
Entertainment level	1.55**	0.09	1.12**	0.07
<b>Sender</b>				
Acquaintance	-0.08	0.04	(base category)	
Celebrity	-0.03	0.04	-0.06	0.03
Close friend	(base category)		0.13**	0.03
<b>Receiver</b>				
Opinion leadership level	0.6**	0.12	0.15*	0.08
Opinion seeking level	0.05	0.12	0.29**	0.08
<b>Control variables</b>				
Age	0.04	0.09	-0.03	0.06
Female	-0.2*	0.09	-0.13*	0.06
Known brand	0.06	0.08	-0.01	0.06
Intercept	4.18	0.09	4.55	0.06
<b>Contextual level variance</b>				
<b>Variance</b>				
Message group	0.01	0.01	0.004	0.003
Respondent	0.62	0.05	0.26	0.02
Residual	0.73	0.02	0.45	0.01
<b>Intraclass correlation</b>				
Message group	0.01		0.02	
Respondent	0.63		0.58	
Residual	0.36		0.40	
-2*Log likelihood	6960.29		5639.25	

\*\*p<.01; \*p<.05

## 5 Discussion

This study aimed to fill a gap in the online communication literature by exploring the impact of reading brand messages on SNSs that were passed along by others. The first key finding is the importance of the message evaluation for pass-along behavior. Receivers are more likely to pass along a brand message when they perceive it to be informational and entertaining. This extends earlier research on Twitter (Araujo et al., 2015) by demonstrating that the way that the receivers *per-*



ceive the message, more than just how the message is written, is important. These findings also confirm that utilitarian and hedonic reasons for pass-along behavior, identified in viral advertising research (Chiu et al., 2007; Phelps et al., 2004), are also relevant in the context of brand content diffusion on SNSs via retweeting or sharing. Moreover, message evaluation has the strongest effect on willingness to pass along brand messages as compared to sender or receiver characteristics, with the entertainment (hedonic) dimension having a slightly stronger influence than the informational (utilitarian) dimension. This indicates that receivers tend to place slightly more emphasis on the entertainment value of the brand message when deciding whether to share or retweet it to their own friends on the SNS.

Message evaluation influences not only the willingness to pass along the message, but also the receiver's attitude towards the brand. The more the message is perceived as being informational and entertaining, the more positive the attitude the receiver will have toward the brand. Moreover, message evaluation also has a stronger effect on brand attitudes than receiver or sender characteristics. And, unlike the willingness for pass-along behavior, the informational (utilitarian) dimension has a stronger effect on brand attitudes than the entertainment (hedonic) dimension. This suggests that receivers prioritize the level of information and usefulness of a brand message when they are forming their opinions about a brand.

Another aspect of the communication process investigated by this study was the influence of the sender or, in other words, the person who had passed along the brand message to the receiver. Three different types of sender were investigated: celebrities, information brokers, and close friends. Interestingly, there was no significant difference between the three types of sender included in this study when it came to their ability to stimulate pass-along behavior. The lack of significant results does not provide support to the hypothesis indicating that information brokers (operationalized in this study as acquaintances) and celebrities would be more likely to stimulate pass-along behavior than close friends. One potential reason for this might be that receivers, when evaluating their intention to pass the message along, do so based solely on how entertaining or informational the message is, rather than actively considering who passed it along in the first place. Considering that earlier studies indicate that information brokers are responsible for most of the information diffusion on Twitter (Araujo et al., 2017; Bakshy et al., 2011), it could be argued that their influence is exerted by their ability to bring new information from groups with whom the receiver has little contact. Future studies should investigate this topic further by adopting other designs to simulate information brokerage, evaluating how information novelty may also influence this process, and especially combining survey with observational data. Another potential reason for these findings, specifically for celebri-

ties, is that the brand messages in our study were generic (i.e., did not include any celebrity-specific information), which may then make them less relevant for celebrity endorsements.

Nevertheless, the results indicate that tie strength influences brand attitudes. When receivers read a brand message passed along by a close friend, they were more likely to have stronger brand attitudes than when they received the same message from an acquaintance. This is in line with the idea that strong ties are more important for decision making than weak ties (J. J. Brown and Reingen, 1987), and validates earlier findings on viral campaigns (van Noort et al., 2012) as well as on the influence that tie strength has on purchase intentions when it comes to positive WOM (Baker et al., 2016). Interestingly, contrary to what we hypothesized, reading a brand message passed along by a celebrity did not yield stronger brand attitudes. This is unexpected, considering that celebrity endorsements have been shown to influence consumer attitudes in advertising (Amos, Holmes, and Strutton, 2008) and influence purchase intentions and brand attitudes when celebrities tweet *about* brands (Jin and Phua, 2014). Future studies should investigate this further, and explore whether consumers differentiate between instances where the celebrity is simply passing along a message from a brand, and when the celebrity is taking a more active role in the communication.

The final aspect of the communication process evaluated by this study was the receiver. The findings indicate that people who display general opinion leadership behavior online, and are consulted by others when making purchase decisions, are more likely to pass along brand messages. This indicates that the mechanisms for information diffusion on Facebook and Twitter are also used by opinion leaders and are relevant for consumer-to-consumer eWOM processes even when these processes are for the diffusion of messages created by brands. Along the same lines, the results also indicate that online opinion seekers, who generally ask for advice online from other users before making decisions, are more likely to have better brand attitudes when reading brand messages passed along by other users.

## 5.1 Limitations and future research

While this study provides important findings regarding the effects of brand content diffusion on SNSs, some limitations need to be considered. Firstly, the online survey asked respondents about their intention to pass along fictitious brand messages. While this provides important results, future research should combine observational data and also consider ways to integrate the respondent's

own activities on SNSs and the brands that he or she follows as well as other SNS users with whom they interact into the design. This should also help evaluate how different levels of identification with a brand may influence the process and explore the effects of social identification with the sender at a more specific level, being less reliant on self-reported measures. Secondly, this study focused only on brand messages created on SNSs as regular content (i.e., a tweet or a status update) passed along by other users. Future studies should explore the positive and negative effects of seeking eWOM about brands (created by consumers), brand messages (created by brands) passed along by other users, and advertisements on the SNS. Thirdly, the relationship with the sender was operationalized using binary variables, which may have reduced the granularity of the results. Additional research should investigate the strength of ties with continuous measures. Fourthly, it is important to note that consumers have a wide variety of motivations to engage in WOM and with brand content (Barreto, 2014; Bronner and de Hoog, 2010; Muntinga et al., 2011; Schivinski, Christodoulides, and Dabrowski, 2016), and, when it comes to message evaluations, this study prioritized only two, namely hedonic (operationalized as perceiving the message as entertaining) and utilitarian (perceiving the message as informative) dimensions. Future research should extend these findings, focusing on the influence of other motivations and message evaluations (including self-expression, image management) as well as of other SNS features (e.g., displaying statistics of how often the message has already been shared, or how popular the sender is). Finally, this study explored these effects for consumer brands in general. Future research should evaluate how the influences of sender, message, and receiver characteristics differ depending on other criteria relevant to marketing communication, including differences between market segments, existing levels of brand awareness and/or attitudes, and across cultures.

## 6 Conclusion

Notwithstanding these limitations, this study offers important insights regarding online brand communication and the influence of brand content diffusion on SNSs enabled by information diffusion mechanisms such as retweeting or sharing. The implications to brands are clear, as demonstrated by the key findings from this study. The more informative and entertaining those brand messages are, the more they will be passed along to other SNS users, and the greater their influence on brand attitudes. Moreover, online opinion leaders not only engage in consumer-to-consumer eWOM, but are also willing to pass

along brand messages. This presents an important opportunity for brands to engage with these types of influential users and maximize the reach of the brand message. People who often make decisions or seek advice by engaging in consumer-to-consumer eWOM are also influenced by brand messages passed along by these mechanisms of information diffusion, which reinforces their relevance to online brand communication. These findings, however, provide more than just practical implications to brands. They demonstrate how these new capabilities brought on by SNSs and social media change the balance of the brand-consumer relationship, turning consumers into active participants able to promote their favorite brand messages and to influence their own audience on the SNS in the process.

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