Brand content diffusion on Social Networking Sites: Exploring the triadic relationship between the brand, the individual, and the community
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CHAPTER 4

Consequences of the process
Chapter 4: Consequences of the process

This chapter has been submitted as:

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

The version presented here has been adapted to follow the overall standards and terminology included in the other chapters of the dissertation.
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. Little is known, however, about how reading brand messages passed along by SNS contacts influences online brand communication outcomes. Responses from active SNS users (n = 410) 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.
Consequences of the process

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 et al., 2013; Hutton & 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 & Neijens, 2012; Kwon & Sung, 2011). SNS users, on the other hand, now have access to platforms where they can quickly and easily communicate, publish content, 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 et al., 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 et al., 2015; Jansen et al., 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 et al., 2011; Z. Liu et al., 2012; Petrovic et al., 2011; Suh et al., 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), and positive attitudes towards the brand (Kim et al., 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 that receiving brand-related information on SNSs. Research has focused, for example, on the influence of celebrities’ tweets on purchase intentions (Jin & Phua, 2014) or on the persuasiveness of viral SNS campaigns with online games (Okazaki & Yagüe, 2012; van Noort et al., 2012). 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 advertisement) created by brands (instead of by 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 all of 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 email, or viral campaign.

Investigating brand content information diffusion via these new capabilities brought on by SNSs is a particularly pressing topic for several reasons. Firstly, SNSs have achieved extremely high levels of usage, with over 71% of the US online population across all age groups and up to 90% of the online population aged between 18 and
BRAND CONTENT DIFFUSION ON SNSs

34 years using them regularly (Pew Research Center, 2015). Secondly, although SNS users mention brands or pass along brand messages frequently (Jansen et al., 2009; Nagy & 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 email or viral campaigns. This calls for a deeper understanding of how these new capabilities brought on by SNSs influence the outcomes of the online brand communication process.

In order to fill this gap in the literature, this study extends electronic word-of-mouth (eWOM) and viral advertising research, and evaluates the influence of three aspects of the communication process: the message, the sender, and the receiver. 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.
ONLINE COMMUNICATION AND SNSs

Online communication has brought drastic changes to how brands and consumers interact, as evidenced, for example, by the increased importance of blogs (Kozinets et al., 2010), online consumer reviews (Willemsen et al., 2011), online forums (J. Brown et al., 2007), and by the emergence of webcare as an important tool for brand reputation management (van Noort & Willemsen, 2012). With these changes, discussions that consumers may have had with friends or acquaintances about brands and products in the past – i.e. offline word-of-mouth – also take place in online environments. Brands are frequently mentioned, for example, in Twitter messages (Jansen et al., 2009; Nagy & Midha, 2014), and a large proportion of users discuss their experiences with products by means of social media (Nielsen, 2012).

The amount and diversity of brand-related discussion taking place online have grown together with the prevalence of the internet as a communication medium, as indicated by the evolution of online reviews (Chen, Fay, & Wang, 2011). This change is not relevant just because of the increasing amount of brand-related discussions online. The nature of the discussions is also changing. Because eWOM is written, it is less transient and more findable by opinion seekers (Kimmel & Kitchen, 2014). Opinion leaders can now disseminate their opinions more easily, and to more people (Sun, Youn, Wu, & Kuntaraporn, 2006), even to those who they do not know offline.

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 et al., 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 on brand content diffusion on SNSs.

HYPOTHESES DEVELOPMENT

THE INFLUENCE OF THE MESSAGE

Earlier research highlights the importance of utilitarian and hedonic motivations for engaging in WOM (Mikalef, Pateli, &
Giannakos, 2013) and for other brand-related interactions, such as the shopping experience (Babin, Darden, & 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 & de Hoog, 2010; Hennig-Thurau et al., 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 et al., 2007) the more that they perceive themselves as able to judge the usefulness of the message to the receiver (Huang et al., 2009). The influence of utilitarian motivations and the level of information in messages is 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 & Golan, 2006). Several studies validate this assumption, and show that consumers tend to pass along emails or online content for hedonic reasons (Chiu et al., 2007; Phelps et al.,
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2004), particularly when these messages trigger emotional responses 
(Berger & Milkman, 2012; Dobele et al., 2007; Eckler & 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 that receivers consider a message to be 
informative, the more likely they will be to pass it along.

H2: The more that receivers consider a message to be 
entertaining, 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 higher willingness 
to pass along these messages further. Marketing communication 
research also establishes that attitude towards the advertisement, or 
how the advertisement is perceived, influences attitudes towards the 
The same can be expected with regard to brand messages on SNSs. In 
the context of this study, the evaluation of the brand message, i.e. its 
level of information and entertainment, will contribute to the attitude 
that the receiver has toward the brand. This leads to H3 and H4:

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

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

Innovation diffusion research 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 measured, for example, by 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 & Reingen, 1987). Research on SNSs, for example, indicates that strong ties influence the adoption of new behavior (Bakshy et al., 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).

Research also indicates that weak ties contribute to information diffusion by enabling information to circulate among different groups (J. J. Brown & Reingen, 1987). This is related to the concept of information brokerage, where certain people – information brokers – are able to connect groups of people that would otherwise be disconnected (Burt, 2000), and thus enable the information flow between these groups. 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 et al., forthcoming).

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 & Boyd, 2011b). When celebrities discuss brands – for example on Twitter – consumers who identify with them display stronger product involvement and buying intention (Jin & 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 or are mentioned in these messages (Araujo et al., forthcoming).

The findings above indicate that the type of sender should influence the willingness to pass along the brand message further. Considering findings already available on Twitter indicating that information brokers as well as celebrities 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 research discussed above also provide clear indications that (a) the stronger the tie, the stronger the persuasive influence of the sender (e.g. van Noort et al., 2012) and (b) that celebrities are able to influence product involvement and willingness to purchase products when they are associated with brands on SNSs (e.g. Jin & Phua, 2014). This leads to 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).

**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, & 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 & 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 & 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 et al., 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
BRAND CONTENT DIFFUSION ON SNSs

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.

METHODS

SAMPLE

Members of a US panel who were active social media users participated in the study. A total of 410 respondents completed the questionnaire in December 2014. The respondents’ mean age was 39.07 years (SD = 13.95), and 51% were females, which met quotas for gender and age groups aligned with the Twitter user base in the US (Duggan & Smith, 2014). 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.

PROCEDURE

Respondents participated in an online survey in which they were presented fictitious brand messages, and had to evaluate (a) whether they would pass a particular message along to their friends on
the SNS via retweets or sharing and (b) how informational and entertaining they considered the message to be. All messages contained an indication that either a close friend, a celebrity or public figure they admired or an acquaintance had passed along that message to them on an SNS. In order to provide more general results, each respondent evaluated two sets of three messages: one set for a known brand and another set for an unknown brand. The fictitious brand messages were designed to vary in levels of information and entertainment, and the evaluation used in the analysis was the one made by the respondent, given the level of subjectivity of this assessment.

**MEASURES**

**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” ($M = 4.07, SD = 1.93$).

**Brand attitude**

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

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).

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, & 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 “Strong Agree” (Cronbach’s α = 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 α = 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.

**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 α = 0.94, M = 4.47, SD = 1.45) and online opinion seeking (Cronbach’s α = 0.88, M = 4.70, SD = 1.21) being measured with 8 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.

**Control variables**

Age (M = 39.07, SD = 13.93) and gender (51% females) were included in the analysis as control variables, as earlier research shows that they influence SNS-related behavior (Amichai-Hamburger & Vinitzky, 2010; Hollenbaugh & 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).
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 & 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 COMPAREABLE WITH THE (UNSTANDARDIZED) BINARY VARIABLES.

RESULTS

THE RESULTS, SHOWN IN TABLE 1, INDICATE THAT MESSAGE EVALUATION INFLUENCES THE WILLINGNESS FOR PASS-ALONG BEHAVIOR. THIS
provides support to both H1 and H2. In line with H1, the more that receivers consider brand messages to be informational, 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 that respondents perceive brand messages to be entertaining, the more likely they are to pass them along, with each increase in entertainment levels also increasing pass-along behavior by 0.52.

The results also provide support to H3 and H4, which associated message evaluation with influence on brand attitudes. As proposed by H3, the more that receivers perceive the message to be informative, 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.

The results do not show significant differences between the influences of types of sender and willingness for 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 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.
### Table 1
Results of Cross-Classified Multilevel Models (n = 2460)

<table>
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<tr>
<th></th>
<th>Willingness to Pass Along</th>
<th>Brand Attitude</th>
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<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Message</td>
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<td></td>
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<tr>
<td>Information Level</td>
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<td>0.03</td>
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<tr>
<td>Entertainment Level</td>
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<td>0.04</td>
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<tr>
<td>Celebrity</td>
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<td>0.04</td>
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<td>Receiver</td>
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<tr>
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<td>Opinion-seeking Level</td>
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<td>Female</td>
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<tr>
<td>Known Brand</td>
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<td>0.08</td>
</tr>
<tr>
<td>Intercept</td>
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<td>0.14</td>
</tr>
</tbody>
</table>

**Contextual Level Variance**

|                                |         |     |       |     |
|                                |         |     |       |     |
| 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|

**Intraclass Correlation**

|                                |         |     |       |     |
|                                |         |     |       |     |
| 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**
Table 2
Results of Cross-Classified Multilevel Models with Standardized Variables (n = 2460)

<table>
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<th></th>
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<th>Brand Attitude</th>
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<td>Entertainment Level</td>
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<td>Celebrity</td>
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<td>Receiver</td>
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<tr>
<td>Opinion Leadership Level</td>
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<td>0.12</td>
</tr>
<tr>
<td>Opinion Seeking Level</td>
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<td>Control Variables</td>
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<td>Known Brand</td>
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<td>Intercept</td>
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<td>0.09</td>
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<td>Contextual Level Variance</td>
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<td></td>
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<td>0.01</td>
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<td>Respondent</td>
<td>0.62</td>
<td>0.05</td>
</tr>
<tr>
<td>Residual</td>
<td>0.73</td>
<td>0.02</td>
</tr>
<tr>
<td>Intraclass Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Message Group</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Respondent</td>
<td>0.63</td>
<td>0.05</td>
</tr>
<tr>
<td>Residual</td>
<td>0.36</td>
<td>0.02</td>
</tr>
<tr>
<td>-2*Log likelihood</td>
<td>6960.29</td>
<td></td>
</tr>
</tbody>
</table>

**p<.01; *p<.05
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 highest 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 higher 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 higher influence on brand attitudes as 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.
CONSEQUENCES OF THE PROCESS

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 further 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 perceive 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 of the brand. Moreover, message evaluation also has a stronger effect on brand attitudes than receiver or sender characteristics. And, unlike for willingness for pass-along behavior, the informational (utilitarian)
dimension has a much 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 the receiver, when evaluating their intention to pass the message along, does 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., forthcoming; 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, combining survey with observational data, and evaluating how information novelty may also influence this process. Another potential reason for these findings, specifically for celebrities, is that the brand messages in our study were generic (i.e. did not include any celebrity-
CONSEQUENCES OF THE PROCESS

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 higher 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 & Reingen, 1987), and validates earlier findings on viral campaigns (van Noort et al., 2012).

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 et al., 2008) and influence purchase intentions and brand attitudes when celebrities tweet about brands (Jin & 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 online opinion leadership behavior online, and are consulted by others when making purchase decisions, are more likely to pass along brand messages further. 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.

LIMITATIONS AND DIRECTIONS FOR 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. 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 compare the effects of seeing brand messages passed along by other users with seeing brand messages displayed as advertisements on the SNS. Thirdly, the relationship with the sender was operationalized with binary variables, which may have reduced the granularity of the results. Additional research should investigate the strength of ties with continuous measures in particular. Finally, this study investigates the information diffusion 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, such as differences between market segments, brand awareness, or across cultures.
CONSEQUENCES OF THE PROCESS

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 that brand messages are, the more that they will be passed along to other SNS users, and the higher their influence on brand attitudes. Moreover, online opinion leaders not only engage in consumer-to-consumer eWOM, but also 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 influence their own audience on the SNS in the process.