



UvA-DARE (Digital Academic Repository)

Communicating effectively about CSR on Twitter

Araujo, T.B.; Kollat, J.

Published in:
Internet Research

DOI:
[10.1108/IntR-04-2017-0172](https://doi.org/10.1108/IntR-04-2017-0172)

[Link to publication](#)

Citation for published version (APA):

Araujo, T., & Kollat, J. (2018). Communicating effectively about CSR on Twitter: The power of engaging strategies and storytelling elements. *Internet Research*, 28(2), 419-431. <https://doi.org/10.1108/IntR-04-2017-0172>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Communicating effectively about CSR on Twitter

The power of engaging strategies and storytelling elements

Theo Araujo

*The Amsterdam School of Communication Research,
University of Amsterdam, Amsterdam, The Netherlands, and*

Jana Kollat

*Institute of Management and Organization,
Leuphana University of Lüneburg, Lüneburg, Germany*

Communicating
effectively
about CSR on
Twitter

419

Received 28 April 2017
Revised 26 July 2017
Accepted 27 July 2017

Abstract

Purpose – Corporate social responsibility (CSR) communication is becoming increasingly important for brands and companies. Social media such as Twitter may be platforms particularly suited to this topic, given their ability to foster dialogue and content diffusion. The purpose of this paper is to investigate factors driving the effectiveness of CSR communication on Twitter, with a focus on the communication strategies and elements of storytelling.

Design/methodology/approach – Using a sample of 281,291 tweets from top global companies in the food sector, automated content analysis (including supervised machine learning) was used to investigate the influence of CSR communication, emotion, and aspirational talk on the likelihood that Twitter users will retweet and like tweets from the companies.

Findings – The findings highlight the importance of aspirational talk and engaging users in CSR messages. Furthermore, the study revealed that the companies and brands on Twitter that tweeted more frequently about CSR were associated with higher overall levels of content diffusion and endorsement.

Originality/value – This study provides important insights into key aspects of communicating about CSR issues on social networking sites such as Twitter and makes several practical recommendations for companies.

Keywords CSR, Corporate communications, Social media, Social network sites, Information diffusion

Paper type Research paper

1. Introduction

The importance of corporate social responsibility (CSR) communication continues to grow within corporate communication research and practice (Pollach *et al.*, 2012). Consumers and stakeholders have increasingly higher expectations of brands and companies, which must address ethical issues if they want to achieve a competitive advantage (Du *et al.*, 2010). The relevance of communicating CSR is especially critical given that it can help build a more positive reputation and product perceptions (e.g. Chernev and Blair, 2015), achieve competitive success (Porter and Kramer, 2006), and has become an important expectation for stakeholders (Podnar and Golob, 2007). Effective CSR communication can also increase purchase intention among consumers (e.g. Lee and Shin, 2010; Wigley, 2008) and influence the stakeholder evaluations of an organization, which, in turn, improve the organization's image and reputation in the long term (Du *et al.*, 2010).

© Theo Araujo and Jana Kollat. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial & non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>

Both authors contributed equally to the study.



These findings highlight the importance of companies communicating effectively about CSR activities toward their stakeholders, including consumers. Social networking sites (SNSs), spaces increasingly used by organizations and global brands to engage with consumers (Araujo and Neijens, 2012; Okazaki *et al.*, 2015), have become an ideal space for companies to discuss their CSR activities. Previous research has already indicated that Twitter can provide a favorable environment for communicating CSR, with organizations usually including Twitter among their priorities (Tao and Wilson, 2015). Moreover, organizations with higher CSR ratings tend to build larger communities of followers on Twitter and build it faster when compared to organizations with lower CSR ratings (Lee *et al.*, 2013).

Communicating CSR is not without risks, however, especially when the communication takes place online. Messages about CSR may be met with skepticism by consumers, stakeholders, and the media, who often question the motives of the company (e.g. Cho and Hong, 2009), even perceiving it as engaging in the practice of “greenwashing,” which can ultimately lead to lower trust levels and a negative impact on the company’s reputation. These risks can be reduced when the company acknowledges its own motives (Kim and Lee, 2012; Kim, 2014) or uses storytelling while stimulating employee engagement (Gill, 2015). Therefore, it is critical for an effective CSR communication strategy to engage in dialogue with consumers and stakeholders as a way to not only advertise what the company or brand does with regards to its CSR, but also to receive input from others and provide a greater context for their CSR activities.

This need for engaging stakeholders when communicating about CSR activities makes SNSs such as Twitter even more important. SNSs provide organizations with a powerful tool to disseminate information and foster an open dialogue with a variety of audiences, and they have transformed passive information recipients into powerful communicators by enabling new processes of information sharing, relationship building, and brand community engagement practices (Araujo and Neijens, 2012; Lee *et al.*, 2013; López *et al.*, 2017; Okazaki *et al.*, 2015; Ruehl and Ingenhoff, 2015; Wu *et al.*, 2017), thereby drastically changing the relationship between business and society (Castelló *et al.*, 2016). Therefore, communication professionals need to shift their emphasis from managing audiences to building and maintaining relationships, which is especially relevant in terms of communicating social responsibility (Kent and Taylor, 1998; Taylor *et al.*, 2001). Yet, organizations often struggle with the different dynamics and risks that social media pose to communication practice (Castelló *et al.*, 2016). Additionally, little is known about the actual outcome of CSR communication efforts on SNSs.

This study addressed these uncertainties by investigating whether communicating CSR can aid organizations in their communication strategies. By doing so, it contributes to academic research by extending and applying CSR communication theory on SNSs, specifically on Twitter. Furthermore, the insights provided by this investigation deliver practical implications for managers about the effects of communicating about CSR on Twitter, as well as the most effective strategies to adopt when managing this type of communication. Focusing specifically on companies and brands in the food sector, which has recently been subject to several CSR-related crises, we investigated how CSR messages were associated with Twitter users’ willingness to pass along (information diffusion) and endorse the content created by brands and companies. This investigation was done at two levels, namely, at the message level, in other words, whether and if so how tweeting about CSR topics could lead to a higher level of user response to the message, and at the company account level, i.e., whether tweeting about CSR more frequently also made the brand or company profile more influential in terms of the overall volume of content endorsement or diffusion. The investigation also included whether the use of storytelling increased the likelihood that Twitter users endorsed or passed along the CSR messages created by the

brand and how different communication strategies such as broadcasting information, engaging audiences, and reacting to user questions influenced the CSR communication outcomes on Twitter.

2. Theoretical framework

2.1 CSR communication as a driver for identification with the company

We argue that communicating CSR on Twitter can lead to positive outcomes for organizations to the extent that these communications increase the level of identification that stakeholders, especially consumers, have with the company. More specifically, we argue that online CSR communication can be an important driver for consumer-company (C-C) identification, which is largely defined as the relationship that consumers establish with companies that “help them satisfy one or more key self-definitional needs” (Bhattacharya and Sen, 2003, p. 77). Although having less frequent (physical) interactions with a company than employees have, consumers often establish a strong relationship with and psychological attachment to the company (He and Balmer, 2007).

CSR associations, defined as the perceptions of a company’s “environmental friendliness, commitment to diversity in hiring and promoting, community involvement, sponsorship of cultural activities, or corporate philanthropy” (Brown and Dacin, 1997, p. 70), have been proposed as one of the most influential types of associations that consumers can have with a company (Brown and Dacin, 1997). Past research indicates that perceptions related to social responsibility can influence C-C identification (e.g. Tsai *et al.*, 2015; Wang and Korschun, 2015). The more socially responsible the consumer perceives a company to be, the more she or he will identify with that company from a social perspective (Moon *et al.*, 2015).

Organizations engaged in effective Twitter communication about CSR would be expected to be able to stimulate the extent to which consumers identify with the company, creating higher levels of trust and commitment toward their activities. Drawing from findings on the influence of CSR associations on C-C identification, and given that communicating about CSR can positively influence evaluations about the company and its products (Chernev and Blair, 2015; Du *et al.*, 2010), and purchase intention (Lee and Shin, 2010; Wigley, 2008), we propose that CSR communication can also trigger positive responses among Twitter users. More specifically, considering that both online and offline identification with a company can influence a consumer’s online behavior (Wu *et al.*, 2017) and that CSR-related perceptions can influence identification with the company (Tsai *et al.*, 2015; Wang and Korschun, 2015), we propose that consumers exposed to CSR-related messages on Twitter will be more likely to pass along and endorse these messages. This is reinforced by earlier findings indicating that messages perceived as useful (Yuki, 2015) and informative (Araujo *et al.*, 2015) increase the likelihood that the social media content will be shared or further passed along. We therefore propose the following hypothesis:

- H1.* CSR-related tweets will be associated with higher levels of content (a) endorsement (likes) and (b) diffusion (retweets) than non-CSR tweets.

However, the effects of CSR communication may not be restricted to only influencing Twitter-user behavior on a message-by-message basis. Considering the effects of CSR communication on longer-term concepts such as reputation (e.g. Du *et al.*, 2010), we expect that tweeting about CSR on a regular basis will also affect the overall evaluation of a given brand or company profile. SNSs such as Twitter can be evaluated at the individual update level (the level of the tweet), but they can also be perceived as an aggregation of tweets (account level; Murthy, 2013). Tweets constitute a text corpus and thus resemble coherent narratives. In other words, the CSR content of individual Twitter messages could also influence the overall perception of a company or brand account. One would therefore expect that companies frequently tweeting about CSR would also be perceived as more trustworthy and would have

better reputations than companies that tweet about CSR less frequently (or not at all), and these perceptions should influence the general diffusion and endorsement of content produced by these companies or brands. Thus, we propose the following hypothesis:

- H2. The more often an organization tweets about CSR, the higher the level of content (a) endorsement (likes) and (b) diffusion (retweets) that messages from the organization's Twitter account will generally receive.

2.2 CSR communication strategies

Although Twitter enables organizations to establish dialogues with stakeholders, previous research indicates that these dialogic features are seldom used. Organizations tend to interact only if other Twitter users address them, and CSR-related tweets have been found to be more reactive and less interactive in comparison to non-CSR tweets (Etter, 2013). Organizations also seem to focus more on their own audiences than on building a well-connected CSR network with other stakeholders and organizations. Mostly they focus on promoting themselves and, to a lesser extent, on establishing dialogues (Colleoni, 2013). The relatively low levels of dialogue and interactivity may be partially attributed to managers and companies struggling with the uncertainty of managing Twitter, especially when it comes to the need for reducing the internal locus of control of the communication and shifting the emphasis to building networks (Castelló *et al.*, 2016).

Although communicating CSR on Twitter could have a positive impact on consumers' evaluations that, in turn, influence the image and reputation of an organization, a gap in academic research still exists with regard to how organizations should manage this communication. If anything, previous research indicates that Twitter's dialogic and interactive features are not being used to their full potential when it comes to discussing CSR initiatives. Given the focus on dialogue with audiences and the public, we explore the effectiveness of the CSR communication strategies proposed by Morsing and Schultz (2006), drawing from Grunig and Hunt (1984) public relations theory. These strategies are: the stakeholder information strategy, which focuses on providing information about the organization's CSR initiatives to stakeholders; the stakeholder response strategy, which focuses on identifying the focus of the CSR of the organization by gathering stakeholder feedback via polls, surveys, and dialogue; and the stakeholder involvement strategy, in which the focus of the CSR of the organization is negotiated with stakeholders, who are constantly involved and part of an on-going dialogue with the organization.

Moving one step further, Etter (2014) brought the communication strategies developed by Morsing and Schultz (2006) into the context of social media and identified three similar strategies, namely, the broadcasting, reacting, and engaging strategies. These can be summarized as follows. First, the broadcasting strategy is characterized by one-way communication with dissemination to an anonymous public on Twitter, or occasionally to individual accounts, to distribute specific information. Therefore, the idea of symmetric communication is not present and mutual understandings and benefits cannot be achieved. Second, the reacting strategy incorporates two-way communication with a reactive communication approach, which means answering questions and remarks on Twitter. The relevant audience groups may perceive this communication as reactive and passive. Third, the engaging strategy proactively approaches its two-way communication on Twitter. Hence, following this strategy implies engaging the audience by formulating questions and by mentioning other Twitter members frequently.

The question then becomes which of the CSR communication strategies is the most effective for Twitter. Research on CSR communication, in general, points to a dialogue-oriented stakeholder involvement strategy as the most effective communication strategy, and thus there is increasing interest in implementing such communication strategies into the daily activities of

organizations (Johansen and Nielsen, 2011). Specifically with regard to Twitter, past research has suggested that the engaging strategy should lead to the highest level of identification and a common base of interests and goals between organizations and their stakeholders (Etter, 2014). This suggestion is in line with recent findings on brand identification research in the Twitter community, which indicates that positive outcomes such as brand loyalty are influenced by consumers having actual interactions on the SNS with the brand and other members of the brand community (López *et al.*, 2017). Moreover, earlier research on Twitter information diffusion concluded that communal relationship-oriented messages were more influential toward positive relationship outcomes (including trust) compared to other types of messages (Li and Li, 2014). Based on these findings, we suggest that these higher levels of identification and the general attitudes toward the company driven by the engaging strategy will also influence the willingness of readers to endorse and pass along messages adopting this strategy. We therefore propose the following hypothesis:

- H3. CSR-related tweets using the engaging strategy will be associated with higher levels of content (a) endorsement (likes) and (b) diffusion (retweets) when compared to the broadcasting and reacting strategies.

2.3 Tell me a story! Engaging through aspirational talk on Twitter

The strategies that companies select to communicate with Twitter users about CSR initiatives may be just a part of the picture. We propose that the content of the message plays an important role in how a user will evaluate a tweet about CSR. By selecting, weighting, and excluding certain facts about their CSR initiatives, as well as framing these facts in a certain way, organizational communication on Twitter can have a powerful impact on a stakeholder's perception and interpretation of CSR issues. Several studies have shown that message framing affects individuals' attitudes and cognitive responses (e.g. Iyengar, 1994; Price *et al.*, 1997; Shah *et al.*, 2004). It has been argued that the way issues are presented powerfully shapes how readers understand those issues (Price *et al.*, 1997), which is also true in advertisement (Homer and Yoon, 1992) and sustainability communication (Kolandai-Matchett, 2009).

Communication research often suggests storytelling as a powerful tool for organizations (Golant and Sillince, 2007). Stories are regarded as an instrument to create a favorable organizational image and improve identification processes. They can be defined as a symbolic activity by which the organization and its stakeholders construct and unite on a shared meaning (Boyce, 1995). Accordingly, storytelling is an effective form of communication for collectively creating sense, and it has been found to be particularly effective for communicating CSR (Gill, 2015). Moreover, storytelling has been found to be among the most important drivers of information diffusion when it comes to branded Facebook posts (Yuki, 2015), thus highlighting its importance for social media.

In general, corporate storytelling aims to explain how the organization behaves and how it aligns its actions with its mission and morality, and therefore, it can create an emotional bond with its stakeholders and strengthen the relationship (Dowling, 2006). The CSR stories being told must refer to the values of the corporation that stakeholders can subjectively experience, and they often contain a normative or moralistic tone (Wehmeier and Schultz, 2011). One key feature of values is that they are inseparably tied to emotions (Schwartz, 1999), so we propose that CSR communications should target integrating values and boosting messages with emotions or affective states. Additionally, in contrast to face-to-face communication, communication on Twitter must overcome the absence of personal sensibility (Inauen and Schoeneborn, 2014). Therefore, it should be emphasized that CSR storytelling involves a variety of emotional narratives made in anticipation of the expected value expressions of the stakeholders. Moreover, emotions have been found

to reinforce information diffusion on Twitter (Araujo *et al.*, 2015). This evidence leads to the following hypothesis:

- H4. CSR-related tweets that express emotions will have higher levels of content (a) endorsement (likes) and (b) diffusion (retweets) when compared to tweets without emotional expression.

To be effective, corporate storytelling also needs to resonate with the aspirations of the target stakeholders (Dowling, 2006). Integrating aspirations into corporate storytelling becomes especially crucial with regard to CSR as it “comprises not only action but also symbolic aspirations or visions about an ideal future state” (Castelló *et al.*, 2013, p. 688). In that sense, aspirational talk related to CSR is in itself an action that helps to shape the reality of responsible corporate behavior (Schoeneborn and Trittin, 2013; Schultz *et al.*, 2013), even though the communicated aspirations might not always be totally achieved (Christensen *et al.*, 2013). We expect that aspirational talk will also resonate with Twitter users when it comes to communicating CSR and therefore propose the following hypothesis:

- H5. CSR-related tweets that contain aspirational talk will be associated with higher levels of content (a) endorsement (likes) and (b) diffusion (retweets) when compared to CSR tweets without aspirational talk.

3. Methodology

3.1 Sample and data collection

To answer these research questions, the study sampled Twitter profiles and tweets from food companies included in the Fortune Global 500 ranking. More specifically, the sample contained companies in the following industry sectors: beverages, food consumer products, food production, food services, and wholesalers: food and grocery.

The first step in data collection was to identify the Twitter profiles from all companies. Automated scripts reviewed the corporate websites of all the companies and collected any links to Twitter profiles and additional websites for brands belonging to the company. The scripts then crawled each of the brand websites to look for additional Twitter profile links, which were also included in the list.

The second step was to collect information from each of the Twitter profiles found on either the corporate or brand websites. This information was collected using the Twitter application programming interface (API) and stored in a database. For each profile, the scripts collected information such as the name, description, location, number of friends, and number of followers. Using this information, a manual verification was done to validate which of the collected profiles were actually from brands or companies included on the Fortune 500 list.

Also using the Twitter API, the third and final step was to collect the latest 3,200 tweets from each of the corporate or brand Twitter profiles. The information collected included the actual text of the tweet, its language, when it was posted, whether it was a reply to or retweet of another user, the number of likes, and the number of retweets that the tweet received. Only profiles with at least 100 English tweets were kept. In total, this study analyzed a sample containing 135 profiles for 15 companies, and included 281,291 English tweets (243,801 original tweets, and 37,490 retweets from tweets created by other users).

3.2 Dependent variables

The dependent variables in this study were the level of information diffusion, measured as the number of retweets ($M = 14.70$, $SD = 303.18$), and the level of endorsement, measured as the number of likes ($M = 10.10$, $SD = 185.09$), that each tweet received. These variables were first analyzed at the tweet level and then aggregated at the profile level (mean number of retweets and mean number of likes per profile). However, the analysis posed two challenges.

First, there was a large variation in the number of followers for each Twitter profile, which strongly influences the number of likes or retweets that each message could receive. Second, the number of likes and retweets were highly skewed. To address both challenges, the dependent variables were operationalized as the number of log retweets per follower and the number of log likes per follower.

3.3 Independent variables

CSR content. The content of each tweet was categorized as to whether or not it was about CSR. This categorization was performed utilizing supervised machine learning, as previous research on social media has done (Kaiser and Bodendorf, 2012; Okazaki *et al.*, 2015). In total, 23,442 tweets were CSR related (8 percent). The process used for this categorization was as follows.

First, each author categorized approximately 1,500 food-related tweets, with about 20 percent of those tweets being coded by both authors to measure inter-coder reliability. Given that the reliability was considered good (Krippendorff's $\alpha = 0.81$), the second author coded an additional set of tweets, which led to a sample of 5,885 tweets having been manually coded based on their CSR content. Second, using the subsample of manually coded tweets, several different machine learning algorithms from the Python SciKit-Learn library (Pedregosa *et al.*, 2011) were tested to determine an accurate manner for automatically categorizing the tweets relative to their CSR content. The algorithm that had the best performance was the multinomial Naive Bayes, with an *F*-score of 0.73 and accuracy of 90 percent. The *F*-score is in line with previously published social media studies using machine learning (Kaiser and Bodendorf, 2012; Okazaki *et al.*, 2015). Finally, the algorithm was then used to categorize all tweets included in the sample.

Communication strategy. Following the categories suggested by Etter (2014), each tweet was categorized as to whether it used the engaging, reacting, or broadcasting strategy. Custom scripts were used to categorize the tweets as follows. All tweets that were replies to other users were considered to belong to the reacting strategy, which resulted in 18.3 percent of all CSR tweets being in this category. Tweets that contained mentions to other users, used pronouns engaging the audience (e.g. "you" and "your"), or contained questions were categorized as belonging to the engaging strategy. Of all the CSR tweets, 48.4 percent belonged to this category. When measuring this variable at the account level, retweets that the brand or company profile published from other users were also considered to be part of the engaging strategy. All other messages (33.3 percent of the CSR tweets) were classified as belonging in the broadcasting category.

Storytelling. To detect the elements of storytelling in the tweets, Linguistic Inquiry and Word Count (LIWC) software (Pennebaker *et al.*, 2015) was used to categorize each tweet and measure, in particular, whether the tweet contained emotions, operationalized as the presence of affective words detected by LIWC (present in 59 percent of the CSR tweets); or aspirational talk, operationalized as the presence of words in the tweet relating to future focus, as detected by LIWC (present in 9.9 percent of the CSR tweets).

Control variables. For control variables, the presence of links, hashtags, and images or videos were used for each message in line with recommendations from earlier studies (e.g. Araujo *et al.*, 2015), which were measured based on information provided by the Twitter API; as well as the revenue of each company according to its Fortune Global 500 ranking.

4. Results

The results of the multilevel models provided support for *H1* and *H2*, as indicated in Table I. More specifically, at the individual tweet level ($n = 243,801$ individual tweets), the results indicated that the CSR tweets were associated with significantly higher levels of content endorsement (likes per follower) and diffusion (retweets per follower) in comparison to

Table I.
Effects of CSR
tweeting on
information diffusion
and endorsement

Parameter	Tweet level		Account level	
	Diffusion	Endorsement	Diffusion	Endorsement
Intercept	-8.78 (0.56)**	-8.76 (0.54)**	-8.88 (1.02)**	-8.78 (0.98)**
CSR	0.14 (0.01)**	0.10 (0.01)**	3.01 (1.15)**	2.60 (1.11)*
Hashtag Presence	0.32 (0.004)**	0.33 (0.004)**	-0.18 (0.80)	-0.36 (0.77)
Link presence	0.16 (0.004)**	0.10 (0.004)**	-0.82 (0.62)	-0.79 (0.60)
Images or videos	0.99 (0.005)**	1.19 (0.005)**	1.69 (1.20)	2.05 (1.16)
Revenues	-0.00002 (0)	-0.00002 (0)	0 (0)	0 (0)
Var (u_i)	1.91 (0.12)	1.82 (0.11)	1.08 (0.34)	1.03 (0.33)
Var (intercept e_{0j})	0.78 (0.001)	0.83 (0.001)	1.61 (0.11)	1.56 (0.10)
ρ	0.8570	0.8273	0.3095	0.3063
$-2 \times \log$ likelihood	571,478	604,016	528.15	518.28

Notes: Standard errors are in parentheses. ρ indicates the percentage of the variance explained by the group level. * $p < 0.05$; ** $p < 0.01$

non-CSR tweets. These results were significant, even when controlling for company revenue and the presence of hashtags, links, and images or videos in the tweet. At the account level, the results also indicated that brand or company Twitter accounts that tweet more frequently about CSR are, in general, also more likely to have higher levels of endorsement and diffusion of their tweets.

We then proceeded to explore what the most effective strategies were for CSR communication, looking specifically at communication strategies and the impact of storytelling (see Table II). When analyzing only CSR tweets originally created by the company profile ($n = 16,738$, excluding CSR tweets that the company profile retweeted from other users), the results indicated that the engaging strategy was associated with significantly higher levels of content diffusion than the broadcasting and reacting strategies. This provides support to *H3b*. When it came to endorsement, however, tweets using the engaging strategy were associated with significantly higher levels of likes than reactive tweets, but were at the same level as broadcasting tweets. This provides partial support for *H3a*.

The results also provided support for the hypotheses regarding the impact of storytelling elements. The use of emotions (operationalized as the usage of affective words) was

Table II.
Communication and
storytelling impact on
CSR tweets

Parameter	Diffusion	Endorsement
Intercept	Fixed effects -8.20 (0.50)**	-8.25 (0.48)**
<i>Communication strategy</i>		
Broadcasting	-0.05 (0.01)**	-0.01 (0.01)
Engaging	(base category)	(base category)
Reacting	-0.93 (0.02)**	-0.83 (0.02)**
<i>Storytelling elements</i>		
Affective words	0.03 (0.01)**	0.05 (0.01)**
Aspirational talk	0.07 (0.02)**	0.05 (0.01)*
	Random parameters	
Var (u_i)	1.71 (0.11)	1.62 (0.1)
Var (intercept e_{0j})	0.80 (0.004)	0.80 (0.004)
ρ	0.8209	0.8020
$-2 \times \log$ likelihood	40,610	40,877

Notes: Standard errors are in parentheses. ρ indicates the percentage of the variance explained by the group level (profile). Tweets retweeted by brand profiles excluded from the analysis. Control variables included in the model but not reported. * $p < 0.05$; ** $p < 0.01$

associated with significantly higher levels of content endorsement and diffusion. This provides full support to *H4*. Finally, the usage of aspirational talk (operationalized as words related to future focus) was also associated with significantly higher levels of content endorsement and diffusion, providing full support to *H5*.

5. Conclusions and implications

The growing need for companies to communicate about their CSR efforts has raised questions about the effectiveness and implementation of CSR communication strategies (Pollach *et al.*, 2012). The current study addressed this topic by investigating how Twitter can be used by companies and their brands to engage users in content endorsement (“liking”) or diffusion (“retweeting”) processes. Relying on the large sample of 281,291 tweets from brands and companies operating in the food sector, this study provides several important insights into key aspects of CSR communication on Twitter as outlined in the theoretical and practical implications below.

5.1 Theoretical implications

This study contributes several key findings to academic research. First, it shows that CSR-related tweets are more likely to generate engagement among SNS users, as seen by the higher levels of endorsement and information diffusion in comparison to non-related tweets. This key finding extends previous research by showing that the positive effects of CSR communication (e.g. Chernev and Blair, 2015; Du *et al.*, 2010; Lee and Shin, 2010; Podnar and Golob, 2007; Wigley, 2008) are also seen when organizations communicate about CSR on SNSs such as Twitter.

Second, the results showed that this increased level of engagement when communicating CSR on Twitter occurred not only when CSR- and non-CSR-related messages were compared (message level), but it was also influenced by the frequency that a given organizational account on Twitter tweeted about CSR at the aggregate level (account level). Organizational profiles that tweeted more often about CSR were also associated with higher overall levels of information diffusion or endorsement. This finding provides support to the notion that CSR communication is also associated with longer-term concepts such as reputation (Du *et al.*, 2010). Moreover, these findings are in line with the notion that CSR associations are important for consumer behavior in general (Brown and Dacin, 1997), and specifically for C-C identification, as shown in past research.

Third, this study validates suggestions by previous research that the best strategy for communicating CSR is the engaging strategy (Etter, 2014; Johansen and Nielsen, 2011; Morsing and Schultz, 2006) that is also relevant on Twitter. This strategy is particularly important if the objective of the organization is to maximize the reach of the CSR message. More specifically, our findings show that the engaging strategy is associated with higher levels of content diffusion relative to the broadcasting and reacting strategies. Interestingly, the engaging strategy was associated with the same levels of content endorsement as the broadcasting strategy, with both at significantly higher levels than the reacting strategy. This finding provides further evidence that being proactive in CSR communications, either by broadcasting information or engaging audiences, is particularly valued by Twitter users, as indicated by the higher content endorsement levels. This is in line with earlier research, which also indicated that the reacting strategy has a high risk of the corporation being perceived as reactive, passive, or uncommitted when it comes to CSR (Etter, 2014).

Finally, our findings also provide evidence for the notion that the elements of storytelling are particularly important when it comes to CSR communication on Twitter. The results demonstrate that both the usage of emotions (operationalized as the usage of affective words) and aspirational talk (operationalized as words related to future focus) are associated with higher levels of content endorsement and diffusion. These results validate the idea that CSR

communication is not exclusively utilitarian, but can be told with stories possessing a more normative and moralistic character (Wehmeier and Schultz, 2011) and, as Christensen *et al.* (2013) indicated, “may be regarded in a positive light as aspirational talk with potential to change organizations toward CSR improvements” (p. 386). Moreover, these findings validate past Twitter research on information diffusion that highlighted the role of emotional cues as a catalyst for informational posts (Araujo *et al.*, 2015) and, more importantly, validates that the findings on the importance of storytelling for information diffusion on Facebook (Yuki, 2015) are also valid on Twitter, specifically for CSR communication.

5.2 Practical implications

The findings of this study not only extend earlier theories and research regarding CSR communication, but they also present several implications for practice. First, the results showed that discussing CSR topics presented an opportunity for practitioners to reach audiences that do not necessarily follow the brand, as Twitter users were more likely to pass along a CSR-related tweet to their own audience via retweets than a non-CSR-related tweet, and therefore extended the reach of the message to new users. Second, discussing CSR-related topics was also associated with higher levels of information diffusion and endorsement, not only at the message level, but also at the aggregate (account) level. This finding suggested that organizations should not consider communicating CSR on Twitter as a one-time activity, but rather as an on-going process. Third, the results indicated that companies should make special efforts to engage stakeholders (including consumers) in their CSR communication on Twitter, as demonstrated by the engaging strategy being associated with higher levels of information diffusion (relative to all other strategies) and content endorsement (relative to the reacting strategy). Finally, the results also showed that effective CSR communication on Twitter benefited not only from the adoption of an engaging strategy and discussing CSR topics on an on-going basis, but when storytelling elements such as emotions and aspirational talk were included in the message, it was also associated with particularly improved content diffusion and endorsement.

6. Limitations and future research

While this study makes important contributions to the field of CSR communication on social media, some limitations need to be considered. First, the study focused specifically on tweets from top brands and companies operating in the food sector, which has been subject to several CSR-related crises in the recent past. While these findings might also be generalizable to other industry segments, future research should validate these assumptions. Second, this study relied on automated content analysis techniques (LIWC software) for detecting emotions and aspirational talk. Moreover, machine learning was used to categorize whether or not the tweets were about CSR. While automated content analysis techniques have the potential to enable researchers to deal with larger sets of data in fields such as journalism and communication research (Boumans and Trilling, 2016), it must be noted that the level of detail in the coding done specifically for this study may not be as high as manual content analysis techniques would allow. Third, it must be noted that the variance of the dependent variable explained by message-level characteristics (including whether the message was about CSR and the CSR strategy used) is limited, as shown by the high intra-class correlation levels and the relatively small values of the regression coefficients. The research design employed allows for understanding significant associations between message characteristics and the dependent variables, but it cannot attribute direct causal mechanisms. Moreover, the CSR tweets were compared to the non-CSR tweets as a group. While this is a strong first step toward understanding the impact of tweeting about CSR, future studies should explore this further by comparing messages about CSR with other specific categories of messages (e.g. product information) and specific topics within CSR communications. Finally, this study focused primarily on how strategies adopted by company profiles were associated with user

responses in terms of information diffusion and endorsement without exploring how Twitter users articulate themselves regarding CSR or how they may proactively engage companies regarding CSR topics. Future research should extend these findings and, for example, investigate whether Twitter users penalize companies when they tweet about aspirations that may not be realistic or are in strong contrast with the current perceptions of the reputation and actions of the company.

References

- Araujo, T. and Neijens, P. (2012), "Friend me: which factors influence top global brands participation in social network sites", *Internet Research*, Vol. 22 No. 5, pp. 626-640.
- Araujo, T., Neijens, P.C. and Vliegenthart, R. (2015), "What motivates consumers to re-tweet brand content? The impact of information, emotion, and traceability on pass-along behavior", *Journal of Advertising Research*, Vol. 55 No. 3, pp. 284-295.
- Bhattacharya, C.B. and Sen, S. (2003), "Consumer-company identification: a framework for understanding consumers' relationships with companies", *Journal of Marketing*, Vol. 67 No. 2, pp. 76-88.
- Boumans, J.W. and Trilling, D. (2016), "Taking stock of the toolkit: an overview of relevant automated content analysis approaches and techniques for digital journalism scholars", *Digital Journalism*, Vol. 4 No. 1, pp. 8-23.
- Boyce, M.E. (1995), "Collective centring and collective sense-making in the stories and storytelling of one organization", *Organization Studies*, Vol. 16 No. 1, pp. 107-137.
- Brown, T.J. and Dacin, P.A. (1997), "The company and the product: corporate associations and consumer product responses", *Journal of Marketing*, Vol. 61 No. 1, pp. 68-84.
- Castelló, I., Etter, M. and Årup Nielsen, F. (2016), "Strategies of legitimacy through social media: the networked strategy", *Journal of Management Studies*, Vol. 53 No. 3, pp. 402-432.
- Castelló, I., Morsing, M. and Schultz, F. (2013), "Communicative dynamics and the polyphony of corporate social responsibility in the network society", *Journal of Business Ethics*, Vol. 118 No. 4, pp. 683-694.
- Chernev, A. and Blair, S. (2015), "Doing well by doing good: the benevolent halo of corporate social responsibility", *Journal of Consumer Research*, Vol. 41 No. 6, pp. 1412-1425.
- Cho, S. and Hong, Y. (2009), "Netizens' evaluations of corporate social responsibility: content analysis of CSR news stories and online readers' comments", *Public Relations Review*, Vol. 35 No. 2, pp. 147-149.
- Christensen, L.T., Morsing, M. and Thyssen, O. (2013), "CSR as aspirational talk", *Organization*, Vol. 20 No. 3, pp. 372-393.
- Colleoni, E. (2013), "CSR communication strategies for organizational legitimacy in social media", *Corporate Communications: An International Journal*, Vol. 18 No. 2, pp. 228-248.
- Dowling, G.R. (2006), "Communicating corporate reputation through stories", *California Management Review*, Vol. 49 No. 1, pp. 82-100.
- Du, S., Bhattacharya, C.B. and Sen, S. (2010), "Maximizing business returns to corporate social responsibility (CSR): the role of CSR communication", *International Journal of Management Reviews*, Vol. 12 No. 1, pp. 8-19.
- Etter, M. (2013), "Reasons for low levels of interactivity: (non-) interactive CSR communication in twitter", *Public Relations Review*, Vol. 39 No. 5, pp. 606-608.
- Etter, M. (2014), "Broadcasting, reacting, engaging – three strategies for CSR communication in Twitter", *Journal of Communication Management*, Vol. 18 No. 4, pp. 322-342.
- Gill, R. (2015), "Why the PR strategy of storytelling improves employee engagement and adds value to CSR: an integrated literature review", *Public Relations Review*, Vol. 41 No. 5, pp. 662-674.

- Golant, B.D. and Sillince, J.A.A. (2007), "The constitution of organizational legitimacy: a narrative perspective", *Organization Studies*, Vol. 28 No. 8, pp. 1149-1167.
- Grunig, J.E. and Hunt, T. (1984), *Managing Public Relations*, Vol. 343, Holt, Rinehart and Winston, New York, NY.
- He, H. and Balmer, J.M.T. (2007), "Identity studies: multiple perspectives and implications for corporate-level marketing", *European Journal of Marketing*, Vol. 41 Nos 7/8, pp. 765-785.
- Homer, P.M. and Yoon, S.-G. (1992), "Message framing and the interrelationships among ad-based feelings, affect, and cognition", *Journal of Advertising*, Vol. 21 No. 1, pp. 19-33.
- Inauen, S. and Schoeneborn, D. (2014), "Twitter and its usage for dialogic stakeholder communication by MNCs and NGOs", in Tench, R., Sun, W. and Jones, B. (Eds), *Communicating Corporate Social Responsibility: Perspectives and Practice*, Vol. 6, Emerald Group Publishing Limited, pp. 283-310, available at: [www.emeraldinsight.com/doi/abs/10.1108/S2043-9059\(2014\)0000006019](http://www.emeraldinsight.com/doi/abs/10.1108/S2043-9059(2014)0000006019)
- Iyengar, S. (1994), *Is Anyone Responsible? How Television Frames Political Issues*, University of Chicago Press, Chicago.
- Johansen, T.S. and Nielsen, A.E. (2011), "Strategic stakeholder dialogues: a discursive perspective on relationship building", *Corporate Communications: An International Journal*, Vol. 16 No. 3, pp. 204-217.
- Kaiser, C. and Bodendorf, F. (2012), "Mining consumer dialog in online forums", *Internet Research*, Vol. 22 No. 3, pp. 275-297.
- Kent, M.L. and Taylor, M. (1998), "Building dialogic relationships through the world wide web", *Public Relations Review*, Vol. 24 No. 3, pp. 321-334.
- Kim, S. and Lee, Y.-J. (2012), "The complex attribution process of CSR motives", *Public Relations Review*, Vol. 38 No. 1, pp. 168-170.
- Kim, Y. (2014), "Strategic communication of corporate social responsibility (CSR): effects of stated motives and corporate reputation on stakeholder responses", *Public Relations Review*, Vol. 40 No. 5, pp. 838-840.
- Kolandai-Matchett, K. (2009), "Mediated communication of 'sustainable consumption' in the alternative media: a case study exploring a message framing strategy", *International Journal of Consumer Studies*, Vol. 33 No. 2, pp. 113-125.
- Lee, K., Oh, W.-Y. and Kim, N. (2013), "Social media for socially responsible firms: analysis of Fortune 500's Twitter profiles and their CSR/CSIR ratings", *Journal of Business Ethics*, Vol. 118 No. 4, pp. 791-806.
- Lee, K.-H. and Shin, D. (2010), "Consumers' responses to CSR activities: the linkage between increased awareness and purchase intention", *Public Relations Review*, Vol. 36 No. 2, pp. 193-195.
- Li, Z. and Li, C. (2014), "Tweet or 're-tweet'? An experiment of message strategy and interactivity on Twitter", *Internet Research*, Vol. 24 No. 5, pp. 648-667.
- López, M., Sicilia, M. and Moyeda-Carabaza, A.A. (2017), "Creating identification with brand communities on Twitter: the balance between need for affiliation and need for uniqueness", *Internet Research*, Vol. 27 No. 1, pp. 21-51.
- Moon, B.-J., Lee, L.W. and Oh, C.H. (2015), "The impact of CSR on consumer-corporate connection and brand loyalty: a cross cultural investigation", *International Marketing Review*, Vol. 32 No. 5, pp. 518-539.
- Morsing, M. and Schultz, M. (2006), "Corporate social responsibility communication: stakeholder information, response and involvement strategies", *Business Ethics: A European Review*, Vol. 15 No. 4, pp. 323-338.
- Murthy, D. (2013), *Twitter: Social Communication in the Twitter Age*, Polity Press, Cambridge.
- Okazaki, S., Díaz-Martín, A.M., Rozano, M. and Menéndez-Benito, H.D. (2015), "Using Twitter to engage with customers: a data mining approach", *Internet Research*, Vol. 25 No. 3, pp. 416-434.
- Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O., Blondel, M., Prettenhofer, P., Weiss, R., Dubourg, V., Vanderplas, J., Passos, A., Cournapeau, D., Brucher, M., Perrot, M. and Duchesnay, E. (2011), "Scikit-learn: machine learning in Python", *The Journal of Machine Learning Research*, Vol. 12, pp. 2825-2830.

- Pennebaker, J.W., Boyd, R.L., Jordan, K. and Blackburn, K. (2015), "The development and psychometric properties of LIWC2015", University of Texas at Austin, Austin, TX.
- Podnar, K. and Golob, U. (2007), "CSR expectations: the focus of corporate marketing", *Corporate Communications: An International Journal*, Vol. 12 No. 4, pp. 326-340.
- Pollach, I., Johansen, T.S., Nielsen, A.E. and Thomsen, C. (2012), "The integration of CSR into corporate communication in large European companies", *Journal of Communication Management*, Vol. 16 No. 2, pp. 204-216.
- Porter, M.E. and Kramer, M.R. (2006), "The link between competitive advantage and corporate social responsibility", *Harvard Business Review*, Vol. 84 No. 12, pp. 78-92.
- Price, V., Tewksbury, D. and Powers, E. (1997), "Switching trains of thought: the impact of news frames on readers' cognitive responses", *Communication Research*, Vol. 24 No. 5, pp. 481-506.
- Ruehl, C.H. and Ingenhoff, D. (2015), "Communication management on social networking sites: stakeholder motives and usage types of corporate Facebook, Twitter and YouTube pages", *Journal of Communication Management*, Vol. 19 No. 3, pp. 288-302.
- Schoenborn, D. and Trittin, H. (2013), "Transcending transmission: towards a constitutive perspective on CSR communication", *Corporate Communications: An International Journal*, Vol. 18 No. 2, pp. 193-211.
- Schultz, F., Castelló, I. and Morsing, M. (2013), "The construction of corporate social responsibility in network societies: a communication view", *Journal of Business Ethics*, Vol. 115 No. 4, pp. 681-692.
- Schwartz, S.H. (1999), "A theory of cultural values and some implications for work", *Applied Psychology*, Vol. 48 No. 1, pp. 23-47.
- Shah, D.V., Kwak, N., Schmierbach, M. and Zubric, J. (2004), "The interplay of news frames on cognitive complexity", *Human Communication Research*, Vol. 30 No. 1, pp. 102-120.
- Tao, W. and Wilson, C. (2015), "Fortune 1,000 communication strategies on Facebook and Twitter", *Journal of Communication Management*, Vol. 19 No. 3, pp. 208-223.
- Taylor, M., Kent, M.L. and White, W.J. (2001), "How activist organizations are using the Internet to build relationships", *Public Relations Review*, Vol. 27 No. 3, pp. 263-284.
- Tsai, Y.H., Joe, S.-W., Lin, C.-P., Chiu, C.-K. and Shen, K.-T. (2015), "Exploring corporate citizenship and purchase intention: mediating effects of brand trust and corporate identification", *Business Ethics: A European Review*, Vol. 24 No. 4, pp. 361-377.
- Wang, W. and Korschun, D. (2015), "Spillover of social responsibility associations in a brand portfolio", *Journal of Product & Brand Management*, Vol. 24 No. 6, pp. 596-609.
- Wehmeier, S. and Schultz, F. (2011), "Communication and corporate social responsibility", in Ihlen, Ø., Bartlett, J. and May, S. (Eds), *The Handbook of Communication and Corporate Social Responsibility*, ISBN 9781444336344, Wiley-Blackwell, pp. 467-488.
- Wigley, S. (2008), "Gauging consumers' responses to CSR activities: does increased awareness make cents?", *Public Relations Review*, Vol. 34 No. 3, pp. 306-308.
- Wu, S.-H., Huang, S.C.-T., Tsai, C.-Y.D. and Lin, P.-Y. (2017), "Customer citizenship behavior on social networking sites: the role of relationship quality, identification, and service attributes", *Internet Research*, Vol. 27 No. 2, pp. 428-448.
- Yuki, T. (2015), "What makes brands' social content shareable on Facebook?", *Journal of Advertising Research*, Vol. 55 No. 4, pp. 458-470.

Corresponding author

Theo Araujo can be contacted at: t.b.araujo@uva.nl

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com