The effects of information cues on perceived legitimacy of companies that promote corporate social responsibility initiatives on social networking sites

Yoon-Joo Lee<sup>a</sup>, Hye Jin Yoon<sup>b</sup>, Nicole H. O'Donnell<sup>a</sup>

<sup>a</sup>The Edward R. Murrow College of Communication, Washington State University, Pullman, WA 99163, United States
<sup>b</sup>Temerlin Advertising Institute, Southern Methodist University, Dallas, TX 75275-0113, United States

ARTICLE INFO

Keywords:
Corporate social responsibility
Perceived legitimacy
Social networking sites
System-generated information
User-generated information

ABSTRACT

Social networking sites are increasingly used to promote corporate social responsibility initiatives. Consumers can like, share, or comment on corporate social responsibility messages on social networking sites, signaling public approval or disapproval and affecting an individual's perceived legitimacy of the organization. Especially for controversial companies, such as alcohol brands, both perceived legitimacy of a cause and consumer purchase intention might be enhanced by expressions of public support on social networking sites. However, few studies have explored this relationship. The findings from Experiment 1 suggest that the number of followers (low vs. high) affected perceived legitimacy and purchase intention. Experiment 2 revealed that the effects of comment valence on attitudinal and behavioral intention interacted with the number of followers. These findings advance our current knowledge of factors associated with perceived legitimacy of companies that promote corporate social responsibility campaigns on social networking sites. Implications for advertising research and practice are discussed.

1. Introduction

Companies have increasingly invested in corporate social responsibility (CSR) initiatives, such as charity, sustainability, and programs that enhance consumer and employee welfare (Sprinkle & Maines, 2010). Considering that 83% of Americans expect brands to support social causes (Sprinkle & Maines, 2010), knowing how to communicate and engage effectively with consumers through CSR initiatives is crucial.

Companies engage in CSR initiatives to gain legitimacy (Du & Vieira, 2012), repair image (Vanhame & Grobben, 2009), and increase purchase intention (PI) (citation withheld for blind review). Alcohol companies belong to a controversial category due to the addictive nature of alcoholic beverages and the detrimental social impact that addiction can have on families and communities (Grouijou, Dedoulis, & Leventis, 2016). For this reason, alcohol companies have actively promoted “drink responsibly” in their CSR campaigns (Barry & Goodson, 2010). However, due to perceived incongruence between certain behaviors associated with consuming alcoholic beverages and the promotion of responsible drinking, consumers might easily doubt the intention behind these CSR initiatives (Bhattacharya & Sen, 2004), making legitimacy harder to establish (Smith, Cukier, & Jernigan, 2014; Wolburg, 2005). Thus, controversial industries must better understand the channels that might help them establish legitimacy.

Gaining social support might be one way to increase legitimacy (Suchman, 1995). In a marketplace saturated by social media, a good platform for gaining social support for a CSR initiative is social networking sites (SNS). CSR reports and corporate websites typically reach a small audience and research suggests that expansion of promotional efforts through SNS pages (Jeong, Paek, & Lee, 2013) or advertising (Perks, Farache, Shukla, & Berry, 2013) could increase visibility. On SNS pages, consumers can express support for or disapproval of companies, and these expressions become visible through information cues (e.g., number of followers or user comments). These cues inhibit scrutiny of the source (Metzger & Flanagin, 2013; Sundar, 2008) because other consumers, not the company itself, generate them. For example, Anheuser-Busch’s “Friends Are Waiting” video was part of a drunk-driving prevention campaign posted to Budweiser’s Twitter account. This video received significant social support in the form of likes, views, and retweets and garnered positive press coverage for the company (Kim, 2016; Messner et al., 2013). Despite the importance of SNS activity to CSR campaigns and recent examples of successful CSR initiatives on SNS pages, the extent to which this type of public support might affect perceived legitimacy of a controversial brand and/or purchase intention is still unknown.

Content analyses and case studies have explored the potential for brand communication (Lin & Peña, 2011) and electronic word-of-mouth
(Jansen, Zhang, Sobel, & Chowdury, 2009) on SNSs. Only a few experimental studies have examined the causal relationship between unique SNS features and marketing outcomes for CSR campaigns. Using experimental methods, the current study investigated the role of two social support cues in a CSR campaign on Facebook and Twitter: system-generated information and user-generated information. Although many studies have noted the importance of attaining legitimacy through CSR campaigns (e.g., Du & Vieira, 2012), few studies have actually examined the mechanism that leads to perceived legitimacy. To address this gap in the literature, the current study tested for mediating effects of perceived legitimacy between the information cues and responses to the CSR campaign.

Experiment 1 tested the role of system-generated information (i.e., number of followers) on purchase intention, mediated by perceived social norm and company legitimacy, with Twitter as the platform (Fig. 1). This experiment established that perceived social support based on the number of followers helped increase perceived legitimacy. Experiment 2 added user-generated information (i.e., comment valence) and observed its interaction with the number of followers on both Twitter and Facebook. These experimental conditions approximated real-world SNS settings where consumers can see both types of information. We predicted that the strong bandwagon cue (i.e., number of followers) would overpower comment valence effects when the number of followers was high but not when the number of followers was low. The underlying mechanisms were then tested once again. The findings have implications for what to expect and what to monitor when promoting social media campaigns on SNS pages, especially for companies that sell products that are perceived to be incongruent with the message of a CSR campaign.

2. Corporate social responsibility and SNS campaigns

The commercial use of SNSs has many benefits (Hutchings, 2012; Yoo, Choi, Choi, & Rho, 2014), and research shows that Fortune 500 companies and fast-growing corporations are using SNS pages as marketing tools (Barnes & Jacobsen, 2013; Rybalko & Seltzer, 2010). Given this trend, the distinction between system-generated content and user-generated content is important. System-generated content is objective, often numerical information that the system generates (e.g., number of likes, follows, and shares). Westernman, Spence, and Van Der Heide (2012) stated that these cues could be used heuristically to signal how popular a corporation is. The common definition of popular implies a minimum level of approval, which can be considered an expression of a social norm (Cialdini, Kalbren, & Reno, 1991; Goldstein, Cialdini, & Griskevicius, 2008). These heuristic cues can signal whether others approve of a company’s campaign and whether that company adheres to social norms (Westernman et al., 2012). User-generated content consists of cues created by users that signal approval or disapproval.

3. Legitimacy theory in the context of CSR campaigns on SNSs

Legitimacy is a fundamental concept in organizational and social sciences (Breit, 2014; Deephouse & Suchman, 2008; Dowling & Pfeffer, 1975). Suchman (1995) defined legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (p. 574). Perceived legitimacy influences consumer decision-making, and greater perceived legitimacy has been found to increase positive evaluations of a company (Dowling & Pfeffer, 1975; Suchman, 1995). Legitimacy has also been explained using resource-dependence theory (Dowling & Pfeffer, 1975; Suchman, 1995). With limited resources, consumers will spend money on organizations they consider to be legitimate (Chung, Berger, & DeCoste, 2016). This trend motivates companies to engage in CSR initiatives that convey a socially desirable image.

In the case of a controversial product such as alcoholic beverages, companies are more likely to face obstacles to perceived legitimacy due to a reputation for having a negative impact on social and physical health (Grougiou et al., 2016). Despite consumer skepticism, CSR initiatives can help offset negative images generated by a controversial product. A previous study found that controversial companies were more likely to launch CSR campaigns than non-controversial companies in an effort to enhance legitimacy (Grougiou et al., 2016). Thus, especially for controversial brands, understanding how legitimacy might be established in the consumer mind is important.

Companies can use SNSs to gain legitimacy by improving dialogue and engagement with consumers (Seele & Lock, 2015). Cues that show CSR initiatives have gained social support should increase perceived legitimacy of a company. However, the mechanisms through which consumers evaluate CSR initiatives are still unknown. Additionally, even though the importance of legitimacy has received considerable attention in the literature (e.g., Du & Vieira, 2012; Seele & Lock, 2015), only recently have legitimacy measures been developed (Chung et al., 2016). Panwar, Paul, Nybakk, Hansen, and Thompson (2014) found that family-owned (vs. publicly-owned) companies garnered higher perceived legitimacy. However, the current study tested more generalizable elements of system-generated cues (i.e., number of followers) that signal social approval, their potential interaction with user-generated cues (i.e., user comment valence), and the mediating role of perceived legitimacy in CSR campaigns promoted on SNS pages.

4. Number of followers: Antecedent to perceived legitimacy as a signal of social approval

SNS platforms provide opportunities to engage with organizations by following a page (Hofer & Aubert, 2013). The assumption is that followers support the organization and want to receive their messages (Beaudoin, 2011). Furthermore, previous studies have shown that system-generated cues (e.g., number of friends or followers) can influence public opinion. For example, individuals who have many friends on SNSs are judged to be...
more popular than individuals with fewer friends (Antheunis & Schouten, 2011; Tong, Van Der Heide, Langwell, & Walther, 2008; Utz, 2010). Applying this idea to the context of corporate SNS pages, when a company has a high number of followers, consumers are more likely to view the company as credible, trustworthy, and attractive (e.g., Jin & Phua, 2014).

Based on previous research of system-generated information as social capital (Phua & Ahn, 2014) and a signal of social approval (e.g., Hofer & Aubert, 2013), the current study proposed that the number of Facebook or Twitter followers can signal how others evaluate a company’s CSR initiatives (e.g., social approval). Thus, a higher number of followers should lead to greater perceptions of social approval. In addition, what is considered desirable according to social norms is, by definition, “legitimate” (Suchman, 1995). Perceived social support should increase perceived legitimacy of a company because it signals that the company is desirable within the norms of that society (Suchman, 1995). Thus, higher perceived social norm of a CSR initiative should lead to greater perceived legitimacy of the company.

**H1.** When seeing a high number of followers, consumers will be more likely to perceive the company’s CSR initiatives as socially approved (Number of Followers → Social Norm of CSR Initiatives).

**H2.** When perceiving the company’s CSR initiatives as socially approved, consumers will be more likely to perceive the company as legitimate (Social Norm of CSR Initiatives → Perceived Legitimacy).

Consumers become more loyal to a product when they perceive the company to be legitimate (Du, Bhattacharya, & Sen, 2007; Du & Vieira, 2012). The resource-dependence theory of legitimacy contends that consumers, given limited financial resources, are more likely to choose the products of legitimate companies (Chung et al., 2016). Previous studies have shown that perceived legitimacy could bias evaluations of an organization. When consumers perceived a company as legitimate, to minimize cognitive processing (Tost & Lind, 2010), they interpreted new information (e.g., new ad) in alignment with their existing legitimacy judgment (Tost, 2011). Therefore, the perception of a company as legitimate based on a CSR initiative might have a lingering effect on product evaluation. Therefore, as perceived legitimacy increases, purchase intention (PI) should increase.

**H3.** When perceiving a company as legitimate, consumers will have a higher level of PI (Perceived Legitimacy → PI).

In addition, this study examined the underlying mechanisms through which the number of followers might influence PI. A high number of Twitter followers is a sign of social approval (Goldstein et al., 2008), which can influence perceived legitimacy (Jin & Phua, 2014). As consumers are known to support products of companies they consider legitimate, perceived legitimacy, in turn, should positively influence PI (Chung et al., 2016). On the other hand, negative heuristic cues, such as a low number of Twitter followers, might signal that companies have not received social approval, leading consumers to activate defense mechanisms. Lower social approval of CSR initiatives might lead to lower perceived legitimacy of the company and, in turn, lower PI (Metzger, Flanagin, & Medders, 2016).

**H4.** The number of followers will indirectly increase PI via the social norm of CSR Twitter campaigns and perceived legitimacy of the organization (Number of Followers → Social Norm → Perceived Legitimacy → PI).

5. Experiment 1

5.1. Method

5.1.1. Sample and procedure

A between-subjects experimental design was used to test the hypotheses. Research participants were recruited through Amazon Mechanical Turk, which provides representative samples from the United States (Paolacci & Chandler, 2014). Participants received monetary compensation based on fair wages suggested by the site, and a total of 93 individuals participated (Female: 42%; Median age: 36) (see Table 1). After viewing the consent form, participants were randomly exposed to either (a) the low follower condition or (b) the high follower condition. They then responded to the manipulation check and dependent variable items.

5.1.2. Stimuli creation

A Twitter page for a fictitious beer company (Stellar Brewing Co.) was created (see Appendix A). Images from a current campaign for Miller/Coors were used to increase validity (Hu, Lodish, & Krieger, 2007), without any brand information in the photo. The first page was manipulated to have a high or low number of system-generated cues, based on the popular or unpopular Twitter pages of actual alcohol companies. The high condition showed 1876 tweets, 1341 following, and 735 favorites. To draw attention to the manipulation, the first tweet on the page stated, “Today we reached 221,000 followers. Thank you and have a Stellar weekend!” The low condition showed 1876 tweets, 25 following, and 8 favorites. The first tweet on this page read, “Today we reached 40 followers. Thank you and have a Stellar weekend!” Professional tennis player Rafael Nadal was shown holding his hands up in the shape of a “timeout T” next to a graphic of the letters “axi,” spelling the word “Taxi.” The photo also contained a quote from Nadal: “Drinking and driving don’t mix, so take time out to book a taxi.” The stimuli were pretested with 62 students from an undergraduate research pool at a large university in the western United States. Participants successfully found that in the high follower condition, more people were following the company’s page than in the low follower condition ($\chi^2(1) = 54.49, p = 0.0000$). Also, participants in the high follower condition did not agree that the Twitter page had a low number of followers compared to participants in the low follower condition ($\chi^2(1) = 46.97, p = 0.0000$).

5.1.3. Measures

In order to check the manipulation of number of followers, participants were asked to rate four items: (a) “The Stellar Brewing Company has only a few followers on Twitter,” (b) “The number of people following the Stellar Brewing Company is low,” (c) “A lot of people follow the Stellar Brewing Company on Twitter,” and (d) “Based on the

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample demographics for Experiments 1 and 2.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>21–25</td>
</tr>
<tr>
<td>26–35</td>
</tr>
<tr>
<td>36–45</td>
</tr>
<tr>
<td>46–55</td>
</tr>
<tr>
<td>56–65</td>
</tr>
<tr>
<td>66+</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Did not finish high school</td>
</tr>
<tr>
<td>High school</td>
</tr>
<tr>
<td>Some college</td>
</tr>
<tr>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Trade/Technical/Vocational training</td>
</tr>
<tr>
<td>Graduate program degree (M.A. or Ph.D.)</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>


number of followers, the Stellar Brewing Company is popular on Twitter.” These items were measured on a dichotomous scale (1 = yes, 2 = no). Based on Chi-Square tests, participants agreed with the statement “A lot of people follow the Stellar Brewing Company on Twitter” significantly more when they were exposed to the high condition ($\chi^2(1) = 97.10$, $p = 0.0000$). Therefore, the manipulation check was successful. The two perceived social norm items (Hong, Rice, & Johnson, 2012) were (a) “Most of the people I know would support the Stellar Brewing Company’s drunk-driving prevention campaign” and (b) “A lot of people support the Stellar Brewing Company’s Twitter drunk-driving prevention campaign” ($M = 5.31$, $SD = 1.26$).

The four perceived legitimacy items (Chung et al., 2016) were (a) “I think the Stellar Brewing Company is a necessary part of our society,” (b) “The Stellar Brewing Company is a good corporate citizen,” (c) “I think the Stellar Brewing Company is honest,” and (d) “I believe the Stellar Brewing Company follows government regulations” ($M = 4.65$, $SD = 1.05$). The five PI items (e.g., citation withheld for blind review) were (a) “I am likely to purchase alcohol from the Stellar Brewing Company,” (b) “It is possible that I will purchase products made by the Stellar Brewing Company,” (c) “I will probably purchase product made by the Stellar Brewing Company,” (d) “I will consider purchasing products made by the Stellar Brewing Company,” and (e) “I would like to purchase a drink made by the Stellar Brewing Company” ($M = 4.09$, $SD = 1.66$).

5.1.3.1. Covariates. Spokesperson familiarity was measured using two items (a) “I am familiar with Rafael Nadal” and (b) “I was able to recognize the spokesperson in the ad” on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). The mean score was below 4.0 ($M = 3.40$, $SD = 2.53$). A one-sample t-test yielded a score significantly lower than 4.0 ($t(176) = 2.311$, $p = 0.022$), suggesting that participants were not very familiar with the spokesperson. Previous drinking behavior was measured using the following item (Maryland.gov): “For the following questions, one drink equals: 4 ounces of wine, 1 wine cooler, 12 oz of a ‘3-2’ beer, 8–10 oz of a ‘6-point’ beer, malt liquor, ice beer, or ‘microbrew’ beer, a mixed drink with 1 oz of liquor, or a single shot of liquor. Think of the occasion you drank the most this past month. How much did you drink? (1) 0 drinks, (2) 1–2 drinks, (3) 3–4 drinks, (4) 5–6 drinks, (5) 11–12 drinks, (6) 13–14 drinks, (7) 15–16 drinks (8) 17–18 drinks (9) 19 or more drinks” ($M = 2.82$, $SD = 1.96$). Age and gender were also considered as covariates because they can affect how individuals are influenced by CSR communications (citation withheld for blind review).

5.2. Measurement model evaluation

In order to examine the quality of the psychometric properties of the scales used in this study, the measurement model was assessed using Confirmatory Factor Analysis (CFA). This study found that one item for perceived legitimacy (“I think the Stellar Brewing Company is a necessary part of our society”) and one item for PI (“It is possible that I will purchase products made by the Stellar Brewing Company”) had low factor loadings. The two items were dropped to eliminate the risk of measurement error (Singh, 1995). The revised model had good model fit ($\chi^2 = 36.65$ with $df = 27$ at $p = 0.123$, $CFI = 0.99$, $NFI = 0.96$, RMSEA = 0.05) and was used to assess the quality of the measurement model.

The quality of each construct was assessed by its reliability, convergent validity, and discriminant validity in the measurement model. All items loaded on their intended constructs were significant ($p < 0.001$), and the standardized factor loadings ranged from 0.61 to 0.97. Furthermore, composite reliabilities were assessed to ensure the reliability of each construct; these ranged from 0.92 to 0.99, exceeding the minimum recommended value of 0.70. The average variance extracted (AVE) ranged from 0.80 to 0.99. In addition, discriminant validity among the constructs was confirmed by comparing AVE and the squared correlations between the two constructs for each sample. All AVEs for the constructs in each sample were greater than their squared correlations.
correlations, confirming discriminant validity (Fornell & Larcker, 1981).

5.3. Results

Controlling for demographics, drinking behavior, and spokesperson familiarity, PROCESS (Hayes, 2013) was used to test the mediation effects. PROCESS was appropriate for this study because as a bootstrapping technique, it generates higher power and fewer Type I errors than other moderation and mediation approaches, such as the method used in Baron and Kenny (1986) and the Sobel test (Hayes, 2013). The number of followers had a significant positive impact on perceived social norm (β = 0.76, p < 0.01), supporting H1 (see Fig. 2). In turn, participants were more likely to perceive the organization as legitimate (β = 0.50, t = 6.15, p < 0.001), supporting H2, and with higher perceived legitimacy, they were more likely to have higher PI (β = 0.68, t = 4.33, p < 0.001), supporting H3. The control variables (age, gender, amount of alcohol consumption, and spokesperson familiarity) did not have any significant effect on perceived social norm (p > 0.05) or perceived legitimacy (p > 0.05).

The number of Twitter followers had a significant indirect effect on PI via perceived social norm and perceived legitimacy. The bootstrap CIs did not contain zero, indicating that perceived social norm and legitimacy significantly mediated the impact of the number of followers on PI (β = 0.320, CI 95% [0.141, 0.595]), supporting H4. The ad-hoc analysis revealed that number of followers did not significantly impact PI when perceived social norm was the only mediator (β = 0.171, CI 95% [−0.035, 0.472]) nor when perceived legitimacy was the only mediator (β = −0.180, CI 95% [−0.569, 0.190]). Therefore, the ad-hoc tests showed that the number of followers impacted PI through both mediators in combination.

5.4. Discussion

The participants used the system-generated information (i.e., number of Twitter followers) as a cue that signaled public support of a CSR drunk-driving prevention initiative. Perceived social norm increased perceived legitimacy of the company, leading to higher PI.

The number of followers does not capture user sentiment or the importance of interactive dialogue, both of which can have a positive effect on perceived legitimacy as a result of CSR communications (Morsing & Schultz, 2006). When alcohol companies support social issues that seem incongruent with their main line of business, both positively and negatively valenced comments are expected to appear on SNS pages. Thus, examining how negative and positive user sentiments about CSR initiatives sponsored by alcohol companies play a role in shaping perceived legitimacy, attitude, and behavior is particularly important. Therefore, in Experiment 2, the interaction between number of followers and user comment valence was tested. The key mediator (i.e., perceived legitimacy) was again tested in Experiment 2. As Experiment 1 looked at only one SNS platform (i.e., Twitter), Experiment 2 added another SNS platform (i.e., Twitter and Facebook) for greater generalization of findings.

6. Experiment 2

6.1. The effects of number of followers and user comment valence

Experiment 1 observed the effects of number of followers, Experiment 2 examined its interaction with a user-generated cue: user comment valence (i.e., positive vs. negative).

With the explosion of information disseminated through the Internet, the current digital media atmosphere has placed “an unparalleled burden on individuals to locate information that they can trust” (Metzger & Flanagin, 2013, p. 210). Online information often lacks “traditional authority indicators,” such as resources or experts known to be reputable (Metzger & Flanagin, 2013, p. 212). With such “disintermediation” (Metzger & Flanagin, 2013, p. 210), individuals are forced to evaluate information on their own, in overwhelming amounts. As people are known to be cognitive misers in general (Stangor & Duan, 1991), past studies have shown that various cognitive heuristics are used as shortcuts to assess the legitimacy of online information.

One such heuristic that has been influential in forming attitudes is the bandwagon heuristic, which explains the tendency of online users to trust, have more positive attitudes toward, and choose information that has been endorsed by many others. Users have been known to disregard other information or have less scrutiny when such heuristics are available (Metzger & Flanagin, 2013; Sundar, 2008). This phenomenon is not a recent development in information processing. Social norms theory explains that norms serve as a shortcut heuristic cue that informs people how to think and behave (Cialdini, 2001). Norms signal to individuals that an idea, object, or behavior is acceptable to the majority in a society. For social beings who want to fit in, these signals provide easy shortcuts for assessing what to do and what not to do in a society (Jones & Gerard, 1967).

Previous studies have found this bandwagon effect in online settings. Metzger et al. (2010) found that a greater number of endorsements from other users regarding an unfamiliar source decreased skepticism, and Kim and Gambino (2016) found that bandwagon cues had strong positive effects on user attitudes expressed on restaurant review websites. In another study, the number of others who had downloaded particular songs influenced the decision of others to download the same songs (Salganik, Dodds, & Watts, 2006). Curvilinear effects have been observed, such as when moderate numbers of followers on SNS pages were more effective than very low or very high numbers of followers (Tong et al., 2008; Westerman et al., 2012). However, these studies tested the SNS pages of individuals and explained that for unknown individuals (vs. celebrities), having too many followers might have triggered the “unbelievability” heuristic (Westerman et al., 2012) or might have been seen as evidence of soliciting connections (Donath & Boyd, 2004). Such effects are less likely to occur with companies because high numbers of followers are more likely to reflect authentic support or approval by the public.

When the number of followers is low, no bandwagon heuristic is present to signal legitimacy of an SNS page. In this case, the next available information for assessment is user-generated comments. Seeing a handful of positive comments might signal to users that the support of others is present, encouraging them to think about the merits of the post. On the other hand, negative comments might signal disapproval and make users think about the demerits of the post, generating negative bias. Thus, when the number of followers is low, the valence of user-generated comments could have an impact on user response.

When the number of followers is high on an SNS page, the social norm effect could trigger the bandwagon heuristic. As cognitive misers navigating a sea of invalidated information online, users might see a high number of followers as a safe mental shortcut by which to form attitudes toward an SNS page (ASNSpage). As this heuristic is powerful, users will tend to disregard or dismiss any other information (Metzger & Flanagin, 2013), especially any that contradicts the strong endorsement given by a high number of followers (i.e., negative comments). In this case, the valence of user-generated comments should not affect individual assessments of an SNS page and the company that manages it.

Therefore, we propose that when a page has low followers, positive comments would lead to more favorable responses than negative comments. This pattern should not emerge when the number of followers is high. Previous studies have shown that heuristic cues in SNS advertising affected both ASNSpage and PI (Duffett, 2015); therefore, we examined all.

When the number of followers is low:

H5a. ASNSpage will be more favorable for positively (vs. negatively)
valenced comments.

H5b. Perceived legitimacy of the company will be higher for positively (vs. negatively) valenced comments.

H5c. PI for the brand will be higher for positively (vs. negatively) valenced comments.

This study also explored how the interaction effects between system- and user-generated information influenced responses. In Experiment 1, within the unique context of CSR campaigns launched by an alcohol company, perceived legitimacy was a key mediator. For Experiment 2, we proposed that comment valence would indirectly affect consumer response via perceived legitimacy, but only when the number of followers was low. When an individual sees a high number of followers, they are likely to perceive that others approve of a campaign, dismissing any contradictory information (i.e., negative comments). In this case, comment valence is less likely to determine whether individuals perceive a company as legitimate. However, when the number of followers is low, comment valence is likely to signal the approval of others, in turn affecting perceived legitimacy. Consumers can be motivated to evaluate a company’s activities (e.g., CSR communications) in ways that are consistent with levels of perceived legitimacy (e.g., Tost, 2011). Therefore, positive comments should positively influence consumer response via perceived legitimacy. The following mediation effects were hypothesized:

H6a. Comment valence will affect attitude toward the CSR SNS page via perceived legitimacy in the low follower condition (Positive Comment Valence → Perceived Legitimacy → ASNSpage), but not in the high follower condition.

H6b. Comment valence will affect PI via perceived legitimacy in the low follower condition (Positive Comment Valence → Perceived Legitimacy → PI), but not in the high follower condition.

6.2. Method

6.2.1. Subjects and design

A 2 × 2 factorial design (low vs. high) × 2 (valence: positive vs. negative) between-subjects design was used. An online experiment was conducted via the Qualtrics Panel. Initially, 1487 online consumers in the United States were invited to participate. Participants who answered wrongly on the comment valence manipulation checks were removed to ensure a good consistency check. In Experiment 1, the same covariates from Experiment 1 were also tested. The measures for perceived legitimacy and PI were the same as Appendix B.1 and B.2).

6.2.2. Stimuli description

Screenshots of Twitter and Facebook pages were manipulated. The CSR SNS page for the Stellar Brewing Company was called “Stellar Drinks Responsibly.” The pages had identical cues, including a profile photo, company bio, a section that listed likes, shares, and followers, and a main photo post with four comments. The company bio stated, “The Stellar Brewing Company is committed to you. Help us promote safe drinking. Plan ahead, designate a driver, and save lives. Stellar Brewing Company uses this Twitter (Facebook) page to promote responsible drinking.” The main post consisted of a photo of five friends raising their glasses to each other. The photo had a text overlay stating, “designate a driver and enjoy life with Stellar.”

The positive Twitter (Facebook) comments included the following:

(a) “This is awesome. @stellarbrewcoresponsibly (Stellar Brewing Company) fights growing problem - drunk driving,” (b) “Don’t drink and drive @stellarbrewcoresponsibly (Stellar)’s new ad is great,” (c) “Love this!! Thanks @stellarbrewcoresponsibly (Stellar) for giving an opportunity to talk about drunk driving,” and (d) “@stellarbrewcoresponsibly is great (This ad is excellent). You never know when your last day is. Don’t let friends drink and drive. (Good job Stellar Brewing Company)” The negative comments included: (a) “This is fake. Why would @stellarbrewcoresponsibly (Stellar) an alcohol company promote drunk driving prevention?” (b) “Hate this!! @stellarbrewcoresponsibly (Stellar Brewing Company) but everyone in the picture is drinking…” (c) “@stellarbrewcoresponsibly (Stellar) I think it is very hypocritical for a beer company to have a designated driver ad,” and (d) “This is dumb. @stellarbrewcoresponsibly (Stellar) a beer company to have a drunk-driving prevention message.”

The system-generated cues for the low condition included 256 posts, 84 following, and 8 followers. The system-generated cues for the high condition included 256 posts, 1341 following, and 211 K followers. All manipulations (i.e., number of followers and comment valence) remained relatively consistent across the Twitter and Facebook pages. To increase external validity, features only available on Twitter (e.g., “@stellarbrewcoresponsibly”) were removed from consumer comments on the Facebook page (see Appendices B.1 and B.2).

The manipulations were pretested using a sample of 164 general population consumers recruited through M-Turk. Pretest participants were randomly assigned to one of the four conditions and shown either the Facebook page or the Twitter page. First, we tested whether manipulation checks varied across the SNS page type (i.e., Facebook vs. Twitter). Findings show that regardless of SNS type, participants successfully distinguished follower levels. Participants in the high follower condition thought that the SNS pages had a higher number of followers (M = 5.75, SD = 1.41) than the low follower condition (M = 2.20, SD = 1.63) (t(162) = −14.91, p = 0.0000). Furthermore, regardless of the platform, participants who viewed the positive comments reported that the comments were significantly more positive (M = 6.28, SD = 1.12) than the negative ones (M = 1.94, SD = 1.66) (t(162) = −19.63, p = 0.0000).

6.2.3. Procedure and measures

The measures for perceived legitimacy and PI were the same as Experiment 1. The same covariates from Experiment 1 were also tested. The covariates were not significant in the main test and thus excluded from further analysis. ASNSpage was measured using the following three items (MacKenzie, Lutz, & Belch, 1986): (a) “The Stellar Drinks Responsibly [SNS: Facebook or Twitter] page is appealing to me,” (b) “The Stellar Drinks Responsibly [SNS: Facebook or Twitter] page is interesting to me,” and (c) “I like the Stellar Drinks Responsibly [SNS] page I saw.” Internal consistency of the measures ranged from 0.90 to 0.98.

Familiarity testing using one-sample t-tests showed that the participants were unfamiliar with the company name (M = 2.82, SD = 1.93, t(163) = −7.78, p = 0.0000).

6.3. Results

6.3.1. Manipulation checks

Participants in the low follower condition perceived the number of followers as significantly lower (“the number of followers on this [SNS] page was low”) than participants in the high follower condition (Mhigh = 2.97 vs. Mlow = 4.55) (F(1, 250) = 131.15, p = 0.0000). Participants in the positive comment valence condition perceived that the comments were more positive than participants in the negative comment valence condition (Mpositive = 6.34 vs. Mnegative = 2.92) (F(1, 250) = 103.53, p = 0.0000). In addition, a two-way ANOVA was conducted to examine whether comment valence moderated the effects of number of followers. No significant two-way interaction was found.
6.3.2. Measurement model evaluation

According to CFA, the model obtained good model fit ($\chi^2 = 174.47$ with $df = 108$ at $p = 0.001$, $CFI = 0.99$, $NFI = 0.97$, $RMSEA = 0.045$). The quality of each construct was assessed by its reliability, convergent validity, and discriminant validity in each measurement model. The standardized factor loadings ranged from 0.87 to 0.99. Furthermore, composite reliabilities were assessed to ensure the reliability of each construct; they ranged from 0.92 to 0.99, exceeding 0.99. Furthermore, composite reliabilities were assessed to ensure the reliability of each construct; they ranged from 0.92 to 0.99, exceeding 0.99. Additionally, AVE ranged from 0.85 to 0.99, and all AVE values for the constructs were greater than their minimum recommended level of 0.70. AVE ranged from 0.85 to 0.99, and all AVE values for the constructs were greater than their squared correlations, confirming discriminant validity (Fornell & Larcker, 1981).

6.3.3. Hypothesis testing

A multivariate analysis of variance (MANOVA) tested the interaction between number of followers and comment valence on ASNSpage (H5a), perceived legitimacy of an alcohol company (H5b), and PI (H5c). The results revealed a two-way interaction (Wilks’s lambda = 0.97; $F(3, 248) = 2.14$, $p = 0.025$, $\eta^2 = 0.03$). H5a, H5b, and H5c predicted that the low follower group would respond more favorably to the CSR SNS campaign with positively valenced comments than negatively valenced comments. In order to examine whether the findings varied based on the SNS page type, a three-way interaction (Number of Followers × Comment Valence × SNS: Facebook vs. Twitter) was conducted, confirming that the results did not change based on the SNS page type (Wilks’s lambda = 0.99; $F(2, 242) = 2.00$, $p = 0.90$, $\eta^2 = 0.001$). Thus, the samples were combined for further analysis.

To test the hypotheses, separate analyses of variance (ANOVA) were conducted for each dependent variable with the same covariate (see Fig. 3). A significant two-way interaction effect was found on ASNSpage ($F(1, 250) = 6.17$, $p = 0.014$, $\eta^2 = 0.024$). The follow-up simple effects test revealed that when participants saw a low number of followers, ASNSpage was significantly more favorable when positive comments were present ($M_{\text{positive}} = 5.06$, $SD = 1.31$ vs. $M_{\text{negative}} = 3.57$, $SD = 1.65$) ($F(1, 250) = 25.12$, $p = 0.000$), supporting H5a (see Fig. 3). However, when they saw a high number of followers, ASNSpage did not vary based on comment valence ($M_{\text{positive}} = 4.76$, $SD = 1.41$ vs. $M_{\text{negative}} = 4.80$, $SD = 1.35$) ($F(1, 250) = 3.10$, $p = 0.08$).

A significant two-way interaction emerged on perceived legitimacy ($F(1, 250) = 6.87$, $p = 0.018$, $\eta^2 = 0.022$). The simple effects test revealed that in the low follower condition, participants perceived the company as more legitimate when positive comments were present than when negative comments were present ($M_{\text{positive}} = 5.35$, $SD = 1.03$ vs. $M_{\text{negative}} = 4.30$, $SD = 1.33$) ($F(1, 250) = 19.25$, $p = 0.000$), supporting H5b. However, in the high follower condition, perceived legitimacy did not vary based on comment valence ($M_{\text{positive}} = 5.08$, $SD = 1.41$ vs. $M_{\text{negative}} = 4.80$, $SD = 1.35$) ($F(1, 250) = 2.55$, $p = 0.218$). A two-way interaction effect emerged on PI ($F(1, 250) = 70.75$, $p < 0.01$, $\eta^2 = 0.21$). A simple effect test revealed that participants in the low follower condition had greater PI with positive than negative comments ($M_{\text{positive}} = 4.49$, $SD = 1.75$ vs. $M_{\text{negative}} = 3.38$, $SD = 1.83$) ($F(1, 250) = 9.65$, $p = 0.002$), supporting H5c. However, in the high follower condition, no difference emerged.

![Fig. 3. Experiment 2: Two-way interaction of valence by number of followers on perceived legitimacy, ASNSpage, and PI.](image-url)
between comment valence ($M_{positive} = 4.31$, $SD = 2.10$ vs. $M_{negative} = 4.21$, $SD = 2.01$) ($F(1, 250) = 0.09$, $p = 0.764$).

6.3.3.1. Mediation analysis. In the low follower condition, perceived legitimacy significantly mediated the relationship between comment valence and $A_{SNSPage}$ ($b = 0.9768$, CI 95% [0.5989, 1.3774]). Comment valence also influenced PI via perceived legitimacy in the low follower condition ($\hat{b} = 1.1106$, CI 95% [0.6743, 1.5707]). However, in the high follower condition, perceived legitimacy did not significantly mediate comment valence and $A_{SNSPage}$ ($b = 0.2331$, CI 95% [-0.1698, 0.6423]) or PI ($b = 0.2650$, CI 95% [-0.1929, 0.7354]), supporting H6a and H6b. Therefore, the mediation effects of perceived legitimacy between comment valence and attitudinal and behavioral responses were moderated by the number of followers, supporting H6. In addition, when the mediation effect of perceived legitimacy was considered in the model, comment valence did not have a direct effect on PI ($b = -0.04$, $p = 0.82$). However, a direct effect of comment valence on $A_{SNSPage}$ was found ($b = 0.042$, $p = 0.02$) (see Fig. 4).

6.4. Discussion

Experiment 2 supported the claim that consumers will likely dismiss or rationalize negative comments once a strong heuristic cue is established through a high number of followers on SNS pages. On the other hand, companies with a low number of followers can benefit more from positive comments on their SNS pages. Experiment 2 also confirmed that perceived legitimacy played an important role as a mediator in processing CSR campaigns on SNS pages. When the number of followers was low, perceived legitimacy was the driving factor in the influence of comment valence on $A_{SNSPage}$ and PI, but not in the high follower condition. Furthermore, comment valence directly affected $A_{SNSPage}$, without the underlying effects of perceived legitimacy. However, comment valence only indirectly influenced PI via perceived legitimacy. This additional finding suggests that consumers evaluate PI through perceived legitimacy, supporting the resource-dependence theory of legitimacy that contends that consumers' limited resources are allocated to legitimate organizations (Chung et al., 2016). However, when consumers form attitudes toward campaigns, they do not have to allocate limited tangible resources (e.g., money). Therefore, the mediation of perceived legitimacy seems to be an optional route rather than a mandatory one.

7. General discussion

CSR initiatives help companies gain legitimacy, which is likely increase PI (Du & Vieira, 2012), especially for companies that sell controversial products such as alcoholic beverages (Grougiou et al., 2016). SNS pages could help companies reach a large audience and permit two-way communication (e.g., Jeong et al., 2013). To investigate the effects that information cues on SNS pages have on perceived legitimacy of companies trying to promote CSR initiatives, the current study conducted two experiments to measure the effects of system-generated and user-generated information.

Experiment 1 found that system-generated information influenced PI in a positive way for a CSR initiative on a Twitter page. This phenomenon occurred through an increase in perceived social norm and, subsequently, perceived legitimacy, identifying these two mechanisms as the primary drivers of consumer behavior in this context.
to have a unique and important role in the context of CSR. Experiment 2 revealed that system-generated information provided a contextual boundary in the role of user-generated information in forming ASNSPage (Twitter and Facebook) and PI. The findings of this study expand previous studies (Antheunis & Schouten, 2011) by demonstrating that different types of cues on SNS pages might interact and affect perceptions of the company and the page. Only in the low follower condition did comment valence significantly influence perceived legitimacy, ASNSPage, and PI. This finding implies that bandwagon heuristic cues should not be considered independently but in tandem with other information used to evaluate CSR SNS campaigns.

When participants saw a high number of followers, they became less defensive and relied on that information as a heuristic cue. However, when they saw a low number of followers, they likely made an additional effort to search for other cues, such as user-generated information (e.g., consumer comments). This finding contradicts previous studies that found that negative heuristic cues elicited immediate defense mechanisms, leading participants to mistrust information (Metzger et al., 2010). The current study showed that when the number of followers was low, participants might not have mistrusted the SNS page immediately but might have looked for other cues for assessment. Participants who saw a low number of followers seemed to evaluate comment valence more carefully (i.e., positive user comments led to more positive responses). A bandwagon heuristic cue (e.g., a high number of followers) might direct consumers to process information via heuristic routes, leading them to ignore information that requires more cognitive effort, such as comment valence (Metzger et al., 2010). On the other hand, consumers seem less likely to be cognitive misers in the absence of bandwagon heuristic cues on SNS pages.

Furthermore, in Experiment 2, attitudinal responses in addition to PI were examined in relation to perceived legitimacy. Most studies have considered perceived legitimacy a cognitive evaluation. However, the current study showed that perceived legitimacy could also influence affective responses to CSR SNS pages, namely attitude toward the CSR SNS campaign itself (measured with “appealing,” “interesting,” and “like” items), supporting the notion that perceived legitimacy could also be in the affective dimension (Haack, Pfarrer, & Scherer, 2014; Johnson, Hegtvedt, Khanna, & Scheuerman, 2016).

7.1. Theoretical and managerial implications

This study suggests that CSR campaigns on SNS pages can provide an environment conducive to creating perceptions of legitimacy due to its unique technological features. Follower information (especially high numbers) signals social support and, therefore, positively contributes to legitimacy. Perceived social approval through “likes” and “shares,” as well as positive comments or posts, also contribute to higher perceived legitimacy (Sundar, 2008).

The present study supports the idea that legitimacy is determined by the way members of a society perceive, think about, and feel toward an organization (Hatch & Schultz, 1997), confirming that the public must accredit claims of legitimacy (Afsbath & Gibbs, 1990). The current study also aligns with the aforementioned definition of legitimacy, that it is established when an action is perceived to be desirable according to social norms (Suchman, 1995). Even though companies might attempt to create legitimacy (Sonpar, Pazzaglia, & Kornijenko, 2010), if consumers do not accredit it, their CSR efforts could be in vain. When companies use civic engagement to gain legitimacy in the eyes of consumers (Palazzo & Scherer, 2006), they should consider social issues that are supported by the public at large. Previous CSR studies mainly focused on the importance of finding social issues that were important to consumers (e.g., Haley, 1996; citation withheld for blind review). However, our results indicate the importance of showing how much a social cause is publically supported by society as a whole. Consumers need to perceive that others support the social cause in a CSR initiative in order to accredit legitimacy. Going beyond descriptive analysis (Perks et al., 2013), the findings of the current study suggest that CSR initiatives on SNS pages can increase perceived legitimacy.

This study suggests that controversial product companies should not fear CSR initiatives, despite the possibility of negative backlash, as long as the SNS page has high levels of system-generated cues (e.g., a high number of followers). However, if an SNS page has low levels of system-generated cues, the company might need to monitor consumer comments more carefully and react more proactively to negative comments. Considering that consumers have limited resources, if controversial companies fail to communicate their legitimacy, consumers will likely be less willing to allocate their resources to buy their products, as suggested by the resource-dependence theory of legitimacy (Chung et al., 2016).

7.2. Limitations and suggestions for future study

First, prior studies about Facebook have suggested a curvilinear effect of social network size on outcomes (e.g., Westerman et al., 2012). The current study only compared a very high number of followers with a very low number of followers. Follow-up studies could examine how multiple social network sizes (e.g., low, moderate, and high) might have different effects on CSR campaigns on SNS pages. Second, building on the current study, the next step could be to look at emotional responses to CSR messages. Examining emotional responses or going beyond screen-captured images (e.g., videos) could advance study of this topic. Third, while the effect of familiarity with Rafael Nadal was controlled in Experiment 1, the role of spokesperson credibility or attractiveness in CSR campaigns might provide additional insight. Fourth, the current study tested CSR campaigns for a controversial product (i.e., alcoholic beverages). As a promotion of a CSR initiative perceived to be incongruent with the product could be an example of a highly challenging case, the current research could be considered as a conservative test of the theories and hypotheses. Thus, the findings should be generalizable to non-controversial products as well. However, future studies should design new experiments to confirm. Fifth, the current study examined a CSR campaign for a non-controversial social issue, drunk driving prevention, an initiative that the majority will embrace. However, a company could support an issue that turns out to be controversial, yielding uneven consumer support. Practitioners should test the effects of system-generated and user-generated content on CSR initiatives for controversial issues to determine whether the findings hold.

Lastly, the way CSR initiatives might have a lingering effect could be an interesting area of study. Thus, the extent to which previous CSR initiatives affect subsequent ad campaigns could be a longitudinal study with many practical implications. In doing so, dimensions relevant to the notion of perceived legitimacy, such as trustworthiness or brand authenticity, would be important consumer responses to examine.

Because studies examining the dynamic effects of CSR campaigns promoted on SNS platforms are scarce, researchers should continue pursuing this topic with various information cues available on SNS platforms, with different product types (i.e., controversial and non-controversial), and with different social issues (i.e., controversial and non-controversial). These types of studies should have additional practical implications for campaign planners looking to promote CSR campaigns on SNS platforms.
Experiment 1. CSR Twitter campaign stimuli (low number of followers).
Experiment 1. CSR Twitter campaign stimuli (high follower and positive valence).
Appendix B2

Experiment 2. CSR Facebook campaign stimuli (high follower and positive valence).

References


Carmichael, M. (2012). Stat of the day: 83% want brands to support causes. *Advertising Age (January 18).*


