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Corporate Social Responsibility and Facebook: A Splashy Combination?

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Abstract
Literature widely explores Corporate Social Responsibility (CSR), Online Social Networks and consumer behavior individually. However, research linking them has been scarce. Therefore, this study aims to assess the effect of CSR information provided through Facebook on consumers’ brand image and purchase intention, considering the role of consumer’s product involvement. A fictitious brand profile “Splash Citrus” was designed for an online experiment conducted with participants from two countries, Colombia and the Netherlands, studying the effect of the stimulus, communication channel, Facebook versus Video commercial, on purchase intention and brand image. There was evidence that participants receiving CSR information through Facebook have a higher Brand image than participants receiving information through a video commercial. This effect on brand image appears particularly in higher product involved participants. Cross-cultural values did not affect these relationships. CSR and Facebook thus seem a splashy combination allowing managers to implement innovative strategies to achieve financial, social, and, environmental sustainability.

Keywords: corporate social responsibility, online social networks, Facebook, cross-cultural values, consumer behavior

1. Introduction
Corporate Social Responsibility (CSR) and Online Social Networks (OSNs) are topics that have received priority attention by business, ethics and communication management researchers, and have been part of recent frameworks, strategies and regulations. Researchers studied firms’ motivations to engage and effects of CSR programs on several levels, including consumer behavior. There was also focus on the role of social networks as new priority communication channels for companies to identify new market trends and to launch marketing and communication strategies. Especially, Facebook has become one of the most powerful social networks, as the majority of large companies are using it not only as a key marketing tool, but as a channel to achieve some of their strategic objectives.

Although CSR and OSNs and their effects on consumer behavior have been widely studied individually, academic research is scarce addressing their link and effects. This study aims to cover this gap, by analyzing the effect of a firm’s Facebook profile as communication channel for CSR information in Colombia and the Netherlands on consumers’ brand image and purchase intention, and the mediating influence of product involvement in this.

1.1 Corporate Social Responsibility (CSR)
CSR has been the topic of many scientific enquiries and although there is no consensus regarding its definition, it covers “situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams, Siegel, & Wright, 2006). In addition, that CSR’s contribution is to achieve sustainable development (United Nations, 2007) that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). Ideally, a business can achieve sustainability when developing the “triple bottom line”: economic prosperity, environmental quality and social justice (Elkington, 1997). Based on these sources we use as working definition for this study: Firms involve in CSR when they develop actions, strategies, or programs aimed to contribute to the social and environmental wealth of the world through the involvement of their
stakeholders, while maintaining or improving the economic wealth of the company.

However, increased regulations demanding all actors to support the good of society, pressure for customer markets, and pressure from the financial market may also explain the increased involvement of firms in CSR (Nieto & Fernandez, 2004). CSR actions, programs and strategies generally developed by companies are addressed to reduce harm and improve societies’ welfare and way of living. Successful firms need a healthy society, assuring environmental quality by taking actions towards the efficient utilization of land, water, energy, and other natural resources (Porter & Kramer, 2006). Besides, a common form of CSR activity is the cause-related marketing, which involves a company donating a certain amount of money to a non-profit organization and/or a social cause (Nan & Heo, 2007).

So, companies do not get involved in CSR entirely for just voluntary reasons, but also because the general public and customers expect them to respond to issues that are part of their business responsibilities (Porter & Kramer, 2006), and because CSR including values and ethical codes help them to increase competitiveness, gain added value, improve human resource management, avoid the repercussions of bad publicity that could affect the customer decision and reduce firms’ shareholder value (Doh & Guay, 2006; Fuentes-García, Nunez-Tabales, & Veroz-Herradon, 2008; Graafland & Eijffinger, 2004).

Consumers are increasingly interested in corporate activities that go beyond the economic aspects, or compliance by law, but that deal with environmental and social issues (Bigne, Andreu, Chumpitaz, & Swaen, 2006). After their experimental research Nan and Heo (2007), concluded that an ad including CSR components had a positive effect on consumers’ attitude towards the company, regardless brand consciousness and fit between the social cause and the brand. However, Porter and Kramer (2006) assume that companies that develop CSR programs only to satisfy external pressures, end up in “a series of short-term defensive reactions” with no impact in society and in the firm’s strategy. Consumers will sponsor firms when they perceive CSR actions are not related to their financial objectives as a firm, but rather are an expression of their social motivation (Barone, Miyazaky, & Taylor, 2000; Becker-Olsen, Cudmore, & Hill, 2006). Hence, CSR communication strategy should be transparent and communication to the public must be felt as true and authentic, rather than mere advertisement or public relations (Graafland & Eijffinger, 2004). These findings therefore evidence the need for an important emphasis on the ‘company-to-consumer’ communication involving CSR components (Singh, Del Mar Garcia Sanchez, & Rodriguez, 2008).

1.2 Online Social Networks (OSNs) and Facebook as Marketing and Persuasive Tool

The increase of people using OSNs as part of their personal and professional relations is related to the development of the Web 2.0, based on ethical assumptions about media, culture, and technology that encourage people, to use digital media to express and realize themselves, and to define public discourse (Sholtz, 2008). This allows for greater interaction between internet users and enhances relationship building with unprecedented human-to-human interactions in internet history (Grabner-Kräuter, 2009). OSNs enable firms to monitor emerging changes in social behavior (Cachia, Compano, & Da Costa, 2007), and to “humanize themselves” (Levy, 2010), and to directly interact with a single consumer.

Facebook is not only the most popular and larger OSNs (it crossed the 1 billion-users line; Fowler, 2012; with 1.65 billion monthly active users in the first quarter of 2016; Statistica.com, 2016) but also is the second most popular website in the world after Google.com. Its users include people from all ages, but the highest representation is within the ages of 18 to 34 years old (Alexa, 2011). Facebook helps users to maintain a large network of friends, and to enhance their social capital (Steinfeld, Ellison, & Lampe, 2008).

Facebook as an OSN allows companies to persuade consumers through its interactive and dynamic platform developing communities, facilitating a closer relation, tending to favor companies with which they feel identified (Becker-Olsen et al., 2006). Interactivity empowers a business to engage with the consumers in individual dialogues, developing relationships that can become stronger over time (Godin, 1999), hence producing a stronger effect in purchase intention and brand image than any other traditional media such as TV and printed advertisement, and non-traditional media such as Web Pages, blogs and e-news. Besides, an interactive platform is cost-effective and allows the company to conduct millions of individual dialogues, each consumer at a time (Godin, 1999).

The information provided through Facebook allows users to reach a wide number of people that cannot be compared with any other media; “Facebook provides the perfect opportunity to humanize your brand” (Levy, 2010).

Given these attributes of Facebook, and the theory discussed, it is assumed that CSR information that reflects the firm’s social motivation will have a higher effect on purchase intention and brand image in consumers if...
presented through Facebook than through other (non-personal) communication channels. This leads to the first hypothesis for this study.

**Hypothesis 1:** Consumers receiving CSR information through Facebook will have a higher brand image and purchase intention than consumers receiving the information through other (non-personal) communication channels.

1.3 Consumer Involvement in Facebook

Consumers take information from ONSs in order to take decisions regarding their purchases (Pookulangara & Koesler, 2011), to form their expectations and preferences (Solomon, 2007). Not much literature has been developed relating the use of ONSs to the process of consumer behavior. Nevertheless, ONSs allow an interactive dialogue involving a product and consumers, inviting them to participate in advance in selling a product, rather than interrupting their daily grind with a video commercial or a marketing call, by what Godin (1999) calls 'Permission Marketing', which is more successful than 'interruption' strategies. A consumer decides to participate in this dialogue by becoming a Fan or member of a group provided by a firm, a brand or a product.

This action of consumers taking the decision of becoming a fan or a follower of the company, or accessing the firm’s website to obtain specific information requires a certain level of involvement. This concept relates to the relevance provided by the consumer to a product or brand, advertisement or a purchase situation referred as “objects”, based on his needs, values and interests (Zaichkowsky, 1985). It can be related to the amount of motivation to process information, and to attention given to this information in the purchasing process (Solomon, 2007).

Therefore, when a consumer chooses to access a webpage, or become a fan or follower of a specific firm, it can be inferred that s/he has a higher brand or product involvement in comparison to others who decide not to follow the page. Hence, the effect of the information provided through Facebook requires a higher level of brand/product involvement as required for information transmitted by traditional media such as TV, news, magazines, or newspapers. Furthermore, Facebook calls for similar levels of involvement as required for using Web Pages, blogs, and other OSNs, since these also call for an active stance, motivation and interest of the consumer to get access and process information. Therefore we formulate the second hypothesis of this study.

**Hypothesis 2:** Lower in comparison to higher product involved consumers, have a lower positive effect of Facebook as a communication channel of CSR information on their purchase intention and brand image.

1.4 Cross-cultural Influences

The cultural background of consumers may influence the way they use social networks for information (Pookulangara & Koesler, 2011), their brand recognition, and their opinions about brands or products.

Hofstede (2001) coined one of the most frequently used frameworks for cross-cultural analysis in CSR and business ethics-related issues. This framework is used when the aim is to analyze how the five cultural values influence the different CSR approaches within countries: Power distance, uncertainty avoidance, individualism vs. collectivism, masculinity vs. femininity, and short vs. long-term orientation.

Considering the relevance of cross-cultural values, this study includes two cultural values as control variables which, according to Hofstede (2001), are more likely to affect CSR-related decisions by the consumers: Individualism versus Collectivism, referring to the relationship between the individual and the collectivity that prevails in a given society, represented in the way people live together; and the Masculinity versus Femininity dimension, implying how biological differences affect emotional and social roles of the gender.

2. Method

2.1 Online Experiment

An online experiment was conducted to test the hypotheses on the effect of the communication channel of CSR information on consumer’s purchase intention and brand image, and the interaction effect of the role of product involvement in these relationships. The fictitious brand profile “Splash Citrus” was created to control for participants’ prior learning and experiences with an existent brand, with the possibility to create a preferred brand image in their minds (Brown & Dacin, 1997). A mass product was used to attract the interest and purchase intention of all types of target groups that could be involved in the experiment. The logo and other communication pieces were designed in order to make the brand as authentic as possible. Fictitious cause-related marketing components as part of the CSR strategy of the company were created for the experiment and were included in the two communication pieces created (Nan & Heo, 2007).

Considering the nature of the communication channels included in the experiment, and in order to assure the
ecological validity which states that the conditions of the study must approximate the real-life situation which is under investigation (Brewer, 2000), the experiment was held online. Participants were from Colombia (Latin America) and the Netherlands (Europe).

Facebook was selected as the social media to be used considering its fast growing pace, and the tools it provides to the company to humanize the brand and create communities with consumers. For this research, we designed a Facebook profile fan page called Splash Citrus (http://www.facebook.com/pages/Splash-Citrus-healthy-refreshment/152596098140228).

To increase ecological validity, the extent and way of presenting the information on Facebook was based upon the main findings of a preliminary content analysis, in which Facebook profiles of 15 large companies in both Colombia and the Netherlands listed on the stock exchange, were investigated on what and how the companies post information, respond to consumers, and communicate about marketing campaigns and CSR programs in their Facebook profiles.

For hypotheses testing, a video was included as traditional communication channel. The video, in the format of a commercial uploaded on YouTube (http://www.youtube.com/watch?v=raUK3JMzXkg), was made including the exact same information, texts and pictures presented directly in the Splash Citrus fan page.

2.2 Participants and Procedure

Participants were randomly assigned to one of the two Stimulus groups in this experiment, Facebook and Video commercial. After each participant was exposed to the Stimulus they had to fill out a questionnaire which took 8 to 10 minutes. The questionnaire was slightly modified to fit the different stimuli for the participants receiving the Facebook fan page or the Video commercial. We used 5-point scales for all items in the questionnaire. After recoding negatively formulated items, Cronbach’s alpha and mean composite scales were calculated. For all scales, high scores indicate that participants possessed the characteristic to a greater extent.

Considering the participants had to play a consumers role, people from all ages and professions in Colombia and the Netherlands were invited to participate via e-mail or social media through snowball sampling. The sample contained 86 participants almost balanced over country (Colombia n = 42; the Netherlands n = 44) and Stimulus group (Facebook n = 42; Video commercial n = 44). There were 47 (54.7%) female participants, mean age was 29.1 (SD = 8.5). Of the participants receiving a Facebook profile, 36 (86%) had a Facebook account.

2.3 Measures

2.3.1 Independent Variable

Stimulus, the communication channel used to provide CSR information consisting of two groups:

a) Facebook: This profile includes all features Facebook can offer to a firm’s profile; including pictures, consumers’ comments, and the possibility for the participants to interact with the page (see 2.1).

b) Video commercial: This contained exact the same information as the Facebook profile. It was created and uploaded on YouTube (see 2.1).

2.3.2 Dependent Variables

We used the scale for Purchase intention developed by Baker and Churchill (1977); consisting of 4 items with answers ranging from ‘definitely yes’ to definitely not’. This scale is the source of the physical attractiveness of models in advertisements. It has been used in several marketing with reliability alphas over .70 (Bruner II et al., 2005). Slight modifications in the vocabulary were made to fit the product in consideration. An example item was: ‘Would you like to try Splash Citrus?’ Cronbach’s alpha in this study was .81.

Brand image was measured as the participant’s attitude toward the brand, with the scale first used by Peracchio and Meyeres-Levy (1994). The 8-item scale is composed of semantic differential items (e.g., unappealing-appealing, poor value-excellent value). Studies involving topics such as the consumer attitudes have reported reliability values over .70 (Bruner II et al., 2005). An example item was: ‘Based on the information provided in the “Splash Citrus” Facebook fan page/video, do you perceive Splash Citrus as: Mediocre - Exceptional’; Cronbach’s alpha in the current study was .91.

2.3.3 Interaction Variable

Product involvement was measured with the scale developed by Cho, Lee, and Tharp (2001) assessing the consumer’s general involvement with a particular product category. It is a 3-item scale with answering options ranging from ‘strongly disagree’ to ‘strongly agree’. This scale has been used in studies related with exposure levels to advertisement banners and personal correspondence, with reliability alphas over .81 (Bruner II et al.,
2005). The vocabulary was adjusted to fit the product in consideration, and the purchase intention question was omitted. An example item was: ‘I am interested in (non-alcoholic) beverages in general’; Cronbach’s alpha was .83.

2.3.4 Control Variables, Manipulation Checks and Common Method Variance

We controlled for age, country, cultural values, and English language proficiency of the participants. As participants were from Colombia and the Netherlands two cultural values were measured on which people from both countries differ most according to Hofstede (2001) and that may have an effect on consumer behavior when dealing with social networks (Pookulangara & Koesler, 2011). Scales were used for Individualism-Collectivism (6 items) and Femininity-Masculinity (4 items) with answers ranging from ‘strongly disagree’ to ‘strongly agree’. Example items of the two scales: ‘Group welfare is more important that individual rewards’, and ‘It is more important for men to have a professional career than it is for women’. Cronbach’s alphas were .72 and .71, respectively.

As the Stimulus and the questionnaire were in English we controlled for the level of English language proficiency. Mean number foreign languages spoken by participants was 2.41 (SD = 1.12); with participants from Colombia (M = 1.95, SD = 1.08) speaking fewer foreign languages than in the Netherlands (M = 2.84, SD = 0.99; t(84) = 3.98, p < .001). Self-assessment of English language contained 4 items on the skills: reading, listening, writing, and oral; example item: ‘How would you rate your reading skills in English?’, Cronbach’s alpha was .83.

As manipulation checks two CSR-related questions were included to record the perception of participants of SPLASH Citrus as doing good to society (answering options ranging from “definitely no” to “definitely yes”) and as a responsible product (semantic differential with “not responsible” and “responsible” as extremes).

To test whether common method variance was a problem we conducted a Harman one-factor test (Podsakoff, MacKenzie, & Podsakoff, 2003) on all 30 scaled items. An unrotated Exploratory Factor analysis resulted in seven factors with Eigenvalues > 1 (total explained variance 66.1%, first factor 22.8%) showing that the first factor did not account for the majority of the variance. Hence, we preliminary concluded that common method bias had no detrimental effect on the outcomes of this study.

2.4 Statistical Analyses

IBM SPSS Statistics (Version 22) was used to perform the statistical analyses. A missing value analysis showed that the variables had acceptable values of missing values (under 10%). Most metric variables appeared normally distributed (values of skewness and kurtosis were in the range of ± 2 times the standard errors (Hair, Black, Babin, & Anderson, 2010); except for Brand image (left skewed) and Age (right skewed and peaked). Descriptive analyses were done for all variables. With independent sample t-tests we checked for differences between the two stimulus groups. (M)ANCOVAs were used to test the hypotheses and effects of control variables. The independent variable Stimulus was treated as a fixed factor and Purchase intention and Brand image as dependent variables. To assess the effect of Product involvement we performed simple effect analyses. For all inferential tests an alpha level of .05 was used.

3. Results

3.1 Descriptive Statistics and Manipulation Check

Table 1 shows the descriptive statistics for the all the variables, in total and broken down by Stimulus

Regarding the control variables, independent samples t-tests revealed that in the Facebook group participants were, on average, younger than in the Video group (t(80.2) = 2.36, p < .05) (Note 1). There were no other differences indicating that control variables and manipulation checks differentially worked out in the two groups.

3.2 Effect of Facebook versus Video Commercial on Brand Image and Purchase Intention

Testing Hypothesis 1 on the effect of Stimulus, Facebook versus Video commercial, showed a significant multivariate effect (Wilks’  = .86, F(2, 83) = 6.94, p < .01). Univariate analyses showed that Brand image (F(1, 84) = 5.84, p < .05) was significant, but not Purchase intention (F(1, 84) = 1.87, p = .18). MANCOVAs with control variables age, Individualism-collectivism, Femininity-masculinity, Number of languages spoken, and English language skills showed no effects of the covariate (Note 2). An exception was Country that showed a multivariate main effect (Wilks’  = .89, F(2, 81) = 4.86, p < .05) as well as a univariate main effect for Purchase intention (F(1, 82) = 9.66, p < .01) which evidenced that participants from the Netherlands (M = 3.49, SD = 0.74) scored higher than those from Colombia (M = 2.93, SD = 0.90). However, there was no univariate effect for Brand image and the effects of Stimulus were similar to the outcomes without Country as covariate.
Given the multivariate effect and univariate effect for Brand image that reappeared in the MANOVA and in almost all MANCOVAs, we conclude there was partial support for Hypotheses 1.

Table 1. Descriptive statistics, means and standard deviations between brackets, for all variables broken down by the two Stimulus groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Facebook (n = 42)</th>
<th>Video Commercial (n = 44)</th>
<th>Total (N = 86)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase intention</td>
<td>3.35 (0.88)</td>
<td>3.10 (0.85)</td>
<td>3.22 (0.87)</td>
</tr>
<tr>
<td>Brand image</td>
<td>3.15 (0.74)</td>
<td>2.74 (0.88)</td>
<td>2.94 (0.83)</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product involvement</td>
<td>3.34 (0.72)</td>
<td>3.23 (0.75)</td>
<td>3.28 (0.73)</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>27.0 (7.12)</td>
<td>31.2 (9.32)</td>
<td>29.1 (8.54)</td>
</tr>
<tr>
<td>Individualism-collectivism</td>
<td>3.13 (0.58)</td>
<td>3.20 (0.62)</td>
<td>3.16 (0.60)</td>
</tr>
<tr>
<td>Femininity-masculinity</td>
<td>2.51 (0.85)</td>
<td>2.44 (0.67)</td>
<td>2.47 (0.76)</td>
</tr>
<tr>
<td>Number of foreign languages spoken</td>
<td>2.45 (1.13)</td>
<td>2.36 (1.12)</td>
<td>2.41 (1.12)</td>
</tr>
<tr>
<td>English language skills</td>
<td>3.99 (0.53)</td>
<td>3.83 (0.58)</td>
<td>3.91 (0.56)</td>
</tr>
<tr>
<td><strong>Manipulation check</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Splash is doing good to society</td>
<td>2.93 (1.02)</td>
<td>2.50 (1.17)</td>
<td>2.71 (1.12)</td>
</tr>
<tr>
<td>Responsible product</td>
<td>3.64 (0.88)</td>
<td>3.64 (0.84)</td>
<td>3.64 (0.85)</td>
</tr>
</tbody>
</table>

### 3.3 Interaction Effect of Product Involvement

Product involvement was statistically significant when included in the model for testing Hypotheses 1 as a covariate (Wilks’ \( \Lambda = .91, F(2, 82) = 3.90, p < .05 \)). To further investigate the effect of Product involvement a median split (\( Mdn = 3.33 \)) was used to categorize groups of relatively low (\( n = 51 \)) and high (\( n = 35 \)) Product involvement participants. Its effect was analyzed together with Stimulus in a MANOVA focusing on simple effects. The multivariate tests were significant in the low (Wilks’ \( \Lambda = .91, F(2, 81) = 4.00, p < .05 \)) and the high Product involvement group (Wilks’ \( \Lambda = .88, F(2, 81) = 5.40, p < .01 \)). Subsequent univariate analyses revealed the following (see also Figure 1).

![Figure 1. Plots (estimated marginal means) illustrating the interaction effect of product involvement in the effect of Stimulus group (Facebook vs. Video commercial) on consumer’s Purchase intention and Brand image](image-url)

For the low Product involvement group, the mean of Purchase intention was significant higher in the Facebook than in the Video group (\( M_{\text{Facebook}} = 3.67, SD_{\text{Facebook}} = 0.81; M_{\text{Video}} = 3.17, SD_{\text{Video}} = 0.79; F(1, 82) = 4.60, p < .05 \)). For the high Product involvement group there was no effect (\( M_{\text{Facebook}} = 2.93, SD_{\text{Facebook}} = 0.81; M_{\text{Video}} = 2.99, SD_{\text{Video}} = 0.94; F < 1 \)).

No effect was found for Brand image in the low Product involvement group (\( M_{\text{Facebook}} = 2.97, SD_{\text{Facebook}} = 0.82; M_{\text{Video}} = 2.84, SD_{\text{Video}} = 0.71; F < 1 \)). However, an effect was found in the high Product involvement group (\( M_{\text{Facebook}} = 3.38, SD_{\text{Facebook}} = 0.55; M_{\text{Video}} = 2.57, SD_{\text{Video}} = 1.09; F(1, 82) = 8.85, p < .01 \)). Subsequent (M)ANCOVAs with control variables age, Individualism-collectivism, Femininity-masculinity, and English language skills showed no effects. However, as was also evidenced in testing Hypothesis 1, Country appeared to have a similar effect on Purchase intention. In addition, Number of languages spoken had a positive effect on Purchase intention. Summarizing, the univariate effect for Purchase intention was not in accordance, but the multivariate effect as well the univariate effect for Brand image were in line, in total there appeared partial evidence for Hypothesis 2.
4. Discussion and Conclusion

In this study we addressed the link between CSR and OSNs and their effects on consumer behavior. In an online experiment we analyzed the effect of a firm’s Facebook profile for transmitting CSR information, in comparison to a video commercial, on participants’ brand image and purchase intention. We also tested the role of product involvement in this. In addition, we assessed whether a set of control variables, age, country, cultural values, and English language proficiency confounded these effects.

In general, there seemed a positive reaction to the information provided in terms of purchase intention and the way the participants perceived the company as a responsible product. Hence, these results to some extent evidence that the development of CSR programs and the diffusion of related information produce a positive effect in the consumer’s perception on CSR information of basic-type products brands like bottled water. As such these findings are consistent with results from previous research (Bigne et al., 2006; Graafland & Eijffinger, 2004; McWilliams & Siegel, 2001; Nan & Heo, 2007).

We found partial support for Hypothesis 1 and thus may conclude that using Facebook as a communication channel of CSR information to some extent yields higher effects than transmittance by means of a Video commercial. It seems especially effective for producing a higher brand image in consumers. Facebook, as an interactive platform facilitating the relationship bonding and the firms “humanizing” (Levy, 2010), indeed seems to be more functional in this respect than a traditional video commercial. The absence of a clear effect on Purchase intention encourages to do further research and study if the two dependent variables in this study may be more complexly related for example as indirect or moderator effects (Wang and Yang, 2010). The analyses of possible confounding variables show that the effects described are quite robust. However, there is an indication of an effect of the two countries involved in this study Colombia and the Netherlands. Participants from the latter country incline to have a higher Purchase intention. Remarkable is that the cultural values studied, Individualism-Collectivism and Masculinity-Femininity (Hofstede, 2001) did not have an influence in the relation between the communication channel of CSR information and the consumer reactions toward the product or brand. This is partly in line with Egri et al. (2004) stating that Individualism-Collectivism does not have an effect on Corporate Social and Environmental Responsibility related issues. However, more research is needed on possible effects of cultural values on processing individual elements of the communication messages to inquire to what extent they are congruent with consumers’ cultural values. In addition, we call for replication research in other countries to assess whether our findings can be confirmed and thus whether they can be generalized to other populations. The design of this experimental research, an online experiment with easy access to stimuli and questionnaire, facilitates this.

The second hypothesis inquired the effect of product involvement. The partial support for it, gives reason to consider product involvement as an important concept to include in research of focusing on CSR and OSNs effecting consumer behavior. In order for a Facebook strategy to be successful, the consumers must have enough involvement with the brand, product or purchase process to become a fan of the Facebook fan page, and agree to receive messages from the firm. This argument is consistent with the findings of Godin (1999) and Solomon (2007) regarding permission marketing. When a consumer decides to give permission to a firm to provide him information, in this case through becoming a follower of a fan page, an interactive dialogue allows the construction of a close relationship that affects the consumer reactions.

Taking into account the specific evidence regarding product involvement we found that it revealed a more fine-grained pattern in comparison to just focusing on the effect of Facebook versus the Video commercial. In line with Hypothesis 2 is the finding that in the high product involved group the effect of Facebook versus the Video commercial is higher for brand image. Involved consumers seem to be more triggered while using Facebook than while being looking at traditional media. Considering the lower costs involved for companies this seems very promising for Facebook not only as a marketing tool but also as a management instrument. However, the results for purchase intention as well as possible confounding effects for country and the number of languages show that the role of involvement is not clear-cut and needs further research in other samples of consumers to substantiate its effects. Using other types of commodities for transferring CSR information in such research would provide insight to what extent the effects of Facebook versus video commercials are general or product dependent.

Considering this research linked three up to date concepts, CRS, OSNs, and consumer behavior, the opportunities for further research are vast. However, some limitations should be acknowledged. The stimuli necessarily abstract from real life. In the case of the TV commercial, in real life the zapping and lack of attention during advertisement could also be a problem influencing over brand image and purchase intention; as well as
the quality of the video that may not be exact as the quality of the advertisements by the largest firms. For this matter, further research could include additional communication channels such as webpages and press releases, to acknowledge these limitations and to have a more comprehensive outcome of the influence of communication channel of CSR information over consumer behavior. Besides, we manipulated the Facebook and Video commercial as two separate channels, but in reality more and more these webpages are allowing interaction and feedback from consumers. So this may have had an effect rather than, for example, comparing a Facebook fan page with a commercial broadcasted on TV.

Another issue is the impact of English proficiency. We showed that there was a non-significant effect on the English language skills but that participants from Colombia spoke fewer foreign languages than those from the Netherlands. Moreover, as the spread of English as well as the attitude towards it seems less favorable in Colombia than in the Netherlands (Vélez-Rendón, 2003, Gerritsen & Nickerson, 2004) this may have biased the sample. Therefore, future studies should develop strategies to encourage more people to participate, with adaptation of the questionnaires and the communication pieces to the local language.

Marketing managers can assess the use of Facebook as a base for diffusion of CSR-related information that could generate positive effects in consumer reactions through an interactive dialogue and therefore in financial performance, generating in this way a cyclical behavior that will allow a further investments in CSR programs, and a sustainable positive performance for the company and society. However, consumer’s involvement has to be a concept that the marketeer cannot leave aside, as it will increase the effect of Facebook as communication channel on brand image. Moreover, marketing managers should think of strategies for making consumers becoming and remaining as Facebook fans of their company.

Facebook is a powerful tool for marketing managers that also cannot be ignored in research. In this study we contributed to possible effects of Facebook in communicating CSR related information. While developing programs aimed to contribute to the social and environmental wealth of the world, it is important that firms maintain or improve their economic sustainability as these are not mutually exclusive but complementary (see Doh & Guay, 2006; Elkington, 1997). Therefore, firms have the need to look for new and update strategies which will allow them to keep executing their responsible role, while maintaining a positive economic performance. This study shows that Facebook may be helpful achieving this and that product involvement is essential here (see Godin, 1999; Solomon, 2007). CSR and Facebook thus seem a splasheshy combination allowing marketeers to implement innovative strategies to achieve the firm’s financial, social, and environmental sustainability.

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### Endnotes

1. Because Levene’s test was significant, t-test results for unequal variances are reported.

2. We performed a MANCOVA with all covariates entered simultaneously as well as a series of MANCOVAs considering the separate effect of each covariate (multivariate and univariate). The categorical covariate country was treated as a fixed factor. In line with Pookulangara and Koesler (2011) it was also tested whether the effect of Stimulus on Purchase intention and Brand image was moderated by the cultural values Individualism-collectivism and Femininity-masculinity, but there appeared no evidence for this. Because of space restrictions statistical outcomes are withheld but can be obtained from the authors.

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