The offline spill-over of signing online petitions against companies: A dual pathway model

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**Purpose** – This paper examines cognitive, emotional, and behavioral reactions caused by online petition campaigns against cases of perceived corporate malpractice, while also contributing to the ongoing debate over the spill-over effects of online activism to offline contexts. A dual pathway model is advanced based on the individual’s motivation to help the people affected by irresponsible corporate behavior and punish the deviant corporation.

**Design/methodology/approach** - Two studies (USA and UK) are used to gather cross-sectional and longitudinal data, which are analyzed using structural equation modelling.

**Findings** - Online petition campaigns relying on the display of victims affected by irresponsible behavior trigger feelings of compassion and anger. While the former leads to campaign support motivated by a desire to help, the latter causes intentions to punish. Intentions to support the petition resulting from this dual pathway influence the actual signing of the petition online and self-reported offline negative word of mouth against the company.

**Social implications** - Both identified pathways should be activated by online petition campaigns to increase online support and spreading offline negative word of mouth. To do so, such campaigns need to increase perceptions of unfairness and victim’s similarity, and likeability.

**Originality/value** - Scant research has examined the psychological processes that explain the effectiveness of online petition campaigns against businesses and the motivations to sign an online petition and engage in subsequent offline behavior. Implications for businesses are also discussed.

**Keywords:** Online petition campaign, Online business protest, Negative word of mouth, Compassion, Anger, Corporate Social Irresponsibility.

**Paper type:** Research paper
Introduction

Technology and the Internet have had a dramatic effect on social movements (Hoffman et al., 2013; Fatkin and Lansdown, 2015; Elliott and Scacchi, 2008), leading to new forms of civic engagement, such as the exponential growth of online petition campaigns, which nowadays can gain support on a global scale (Choy and Schlagwein, 2016; Panagiotopoulos et al., 2011). Research on technology-mediated activism has been mired by controversy surrounding the ability of campaigns and movements initiated online to actually have a significant impact offline (Dutta-Bergman 2006; Cruickshank et al., 2010; Hale et al., 2013).

This paper contributes to this ongoing debate over the spill-over effects of online activism to offline contexts, and particularly examines the cognitive, emotional, and behavioral reactions caused by online petition campaigns against businesses. Scant research has examined the psychological processes that explain online petition campaigns’ effectiveness and underpin motivations to sign an online petition and engage in subsequent offline behavior. In addition, despite significant research on the role of Information and Communications Technology (ICTs) in activism (Earl and Kimport, 2011; Schumann and Klein, 2015), the effects and implications of exposure to online petitions against businesses are still under researched (Martin and Kracher, 2008).

Petitioning is a tool for active participation (i.e., amendment or cancellation) to legislation, policy-making and business operations (Macintosh, 2004), as widespread support for a petition leads to a formal request to examine the issue in question (Macintosh, 2004; Martin and Kracher, 2008). While the use of petitions to influence businesses can be traced back to the 18th century (Martin and Kracher, 2008), corporate accountability in the past was mostly a phenomenon of interest to local communities directly impacted by business practices. Nowadays, corporate accountability is a global phenomenon, as ICTs connect people around the world 24/7 (Martin and Kracher, 2008) and draw attention to cases of corporate social
irresponsibility (CSI) (Lin-Hi and Muller, 2013; Windsor, 2013). Thus, it is imperative to understand the psychological effects and implications of exposure to an online petition campaign against perceived corporate malpractice.

Online petitions are “created, disseminated, circulated, and presented online, and although [...] responses” to the petition may be discussed “in offline contexts, such responses are generated and sent online” (Hale et al., 2013, p. 2). Hence, this paper offers valuable communication insights on how to make online petition campaigns against businesses more persuasive in terms of eliciting both online and offline campaign support behaviors. Potential detrimental effects for businesses are also discussed.

**ICTs and Online Activism: The ongoing Debate**

Despite the advantages offered by information technologies in the promotion of activism (Earl and Kimport, 2011; Watts and Wyner, 2011), many stress that online community participation actually competes with community participation offline. People have a limited amount of leisure time, and choosing to spend their time on the Internet, prohibits them from spending it on participating in offline activities (Dutta-Bergman, 2006). The potential for slacktivism (i.e. the “willingness to perform a relatively costless, token display of support for a social cause, with an accompanying lack of willingness to devote significant effort to enact meaningful change” (Kristofferson et al., 2014, p. 1149)), rather than activism is also highlighted in these debates (Fuchs, 2014; Poell and Van Dijck, 2016).

Despite these criticisms, ICTs and online petitions have been the source of great advances in policy-making (Cruickshank et al., 2010) and studies have found that media consumption does not always conflict with civic participation (Keum et al., 2004; Watts and Wyner, 2011). Nevertheless, online mobilizations often fail and it is therefore essential to understand why and how to mobilize citizens around issues that concern them to create meaningful change offline (Fatkin and Lansdown, 2015; Hale et al., 2013).
The effectiveness of online petition campaigns against businesses is also debated. Critics claim that online protest campaigns are a daily occurrence with no real impact on businesses (Gurak and Logies, 2003), while others point to a number of success cases (Deri, 2003; Mahon, 2002). Martin and Kracher (2008) note two separate dimensions of effectiveness. Campaigners who protest have an end goal in mind, which is the ultimate measure of effectiveness. However, the level of attention generated by a campaign also represents an important intermediate goal.

Scant research has examined the psychological processes that explain such campaigns’ effectiveness and underpin motivations to sign an online petition and engage in subsequent offline behavior. By investigating cognitive and affective factors that affect behavioral responses online and offline, this paper can assist in enhancing the persuasiveness of online petitions against businesses as well as devising more effective business crisis communication strategies to respond to these campaigns (Coombs, 2007).

**The dual pathway of online petition campaigns**

What effects do online petitions against businesses have on observers? Corporate failures are often presented as a mixture of normative failures and damaging consequences for potential victims generated by corporate action (Carlsmith, 2008). Online petition campaigns are likely to generate two different pathways of psychological responses based on relevant appraisals activated by the information presented (Bagozzi et al., 1999; Roseman et al., 1994). Figure 1 presents the model proposed in this research. The dual pathway is constituted by the feelings of anger and compassion that are central to individuals’ reactions to an online petition campaign. The hypotheses depicted are discussed next.

[INSERT FIGURE 1 HERE]

**Antecedents of compassion and anger**
Most petitions start by highlighting what campaigners perceive to be corporate wrongdoing. Although the accuracy of the reporting and framing of the issue can vary (Ward and Ostrom, 2006), the expectation is that other individuals will perceive corporate behavior as unfair. Unfairness perceptions are a key antecedent in decisions to act against the corporation (Antonetti and Maklan, 2016a; Lindenmeier et al., 2012). Social-psychology (Carlsmith et al., 2002; Darley and Pittman 2003), organizational behavior (Aquino et al., 2001; Folger and Cropanzano 1998), and marketing (Grappi et al., 2013) find a strong link between appraisals of injustice and decisions to act against a perceived culprit.

Perceived unfairness appeals to individuals’ innate desire to punish deviants that are perceived as breaking social norms (Fehr and Gächter, 2002). Most people react adversely to perceived injustices with a desire for revenge (Bechwati and Morrin, 2003). Such reactions are so strong that can also lead people to decisions that are against their own self-interest (Bechwati and Morrin, 2003; Fehr and Gächter, 2002; Grégoire et al., 2010).

Angry experiences are triggered by perceived injustices and the emotion, in turn, provides the motivational force to attack the perceived wrongdoer (Antonetti and Maklan, 2016a). Anger is an intense negative emotion experienced when a personal goal has been thwarted (Roseman et al., 1994). The association between anger and revenge (Bechwati and Morrin, 2003; Grégoire et al., 2010) as well as between anger and aggression (Berkowitz and Harmon-Jones, 2004) suggests that one of the main social functions of this emotion is the punishment of perceived social deviants (Fischer and Roseman, 2007).

**H1:** Perceived unfairness of corporate behavior has a positive influence on feelings of anger.

In addition to the focus on wrongdoing, online petition campaigns often contain a description of the negative consequences caused by corporate misbehavior. Here the focus is
specifically on how the portrayal of the victims of corporate misdeeds can influence reactions to online petition campaigns.

Advertising research shows that inferences of similarity between the source of the advertisement (sometimes featured within the advert) and the targeted individual have a significant effect on persuasion (Aaker et al., 2000; Berscheid, 1966). In our context, psychological reactions will be determined by the perception that the people mentioned in the online petition are (dis)similar from the self. This hypothesis is consistent with social identity theory (Haslam and Ellemers, 2005). When injustices are perpetrated against people who are perceived to be very different from the self, individuals are more likely to perceive such violations as less severe and consequently less likely to experience anger (Lange and Washburn, 2012). In fact, the personal relevance of the outcomes appraised biases the intensity of the feelings experienced (Batson et al., 2009).

**H2:** Perceived similarity of the victims has a positive influence on feelings of anger.

Similarity however is also a determinant of compassionate responses. Compassion or sympathy is a feeling of concern caused by the plight of others (Goetz et al., 2010). This emotion differs from empathy because it does not require perspective taking, i.e. experiencing feelings and thoughts of others (Gruen and Mendelsohn, 1986). Compassion first develops within kinship structures and remains highly susceptible to similarity judgments (Goetz et al., 2010). For example, national identity heightens concern for the in-group and weakens concern for the out-group (Branscombe and Wann, 1994; Henderson-King et al., 1997). These insights suggest that perceived similarity affects the sense of care towards the victims described in a petition campaign.

**H3:** Perceived similarity of the victims has a positive influence on feelings of compassion.
The negative consequences generated by corporate behavior are likely to be appraised by individuals according to differing levels of suffering of the victims described. Suffering is expected to act as a signal of the severity of the event and this could influence consumers’ feelings of anger (Trivers, 1971). Research on customer revenge (Grégoire et al., 2010) as well as work on outrage for irresponsible corporate behavior (Antonetti and Maklan, 2016a) suggests that feelings of anger are generated by the perception that the problem or crisis experienced is severe. Individuals might interpret suffering as an indirect sign of the severity of the crisis (Lange and Washburn, 2012).

**H4:** Perceived suffering of the victims has a positive influence on feelings of anger.

Suffering is a driver of caring behavior and therefore an appraisal associated with the elicitation of compassion (Goetz et al., 2010). Negative consequences for other individuals (e.g., illness and loss) are likely to generate feelings of compassion (Loewenstein and Small, 2007). It is therefore likely that perusing a petition will cause feelings of compassion for the suffering of those described. The appraisal of suffering can vary depending on personal beliefs and circumstances. For example, the suffering of members of disliked groups is often discounted (Leidner et al., 2010). Perceived suffering appraisals are also important because of the communicative role of compassion: it is a signal that others need help. Individuals are attuned to evaluate the suffering of others so that compassion is not exploited in interpersonal relations (Trivers, 1971).

**H5:** Perceived suffering of the victims has a positive influence on feelings of compassion.

The perception that the suffering experienced is undeserved is also a key determinant of compassion. Compassion (Goetz et al., 2010) and empathy (Zaki, 2014) are motivated experiences that vary depending on our perception of the sufferers. If, for example because of intergroup (Brewer and Kramer, 1985) or cultural (Weiner, 1985) prejudice, the victims are
considered blameworthy, feelings of compassion will be reduced. Individuals exposed to an online petition campaign might also be motivated to discount others’ suffering because of an intrinsic desire to see the world as fair (Hafer and Begue, 2005). Research suggests that this might be motivated by a desire to deflect part of the blame on the victims themselves (Kay et al., 2005; Skarlicki and Turner, 2014). Consistent with this reasoning individuals are more likely to experience compassion when the petition communicates a likeable image of those affected by corporate behavior.

**H6:** Perceived victims’ likeability has a positive influence on feelings of compassion.

**Emotional reactions and online responses**

Both online and offline outcomes of exposure to online petitions are examined. Firstly, individuals’ intentions to support the petition are assessed. This construct is then expected to influence the actual signing of the petition online and self-reported offline negative word of mouth. These variables taken together help us evaluate the extent to which reading an online petition campaign “spills over” into potentially damaging behavior for a corporation (i.e. negative word of mouth).

Signing a petition online is a volitional behavior and as such its prediction might benefit from the consideration of behavioral intentions (Ajzen, 1988; Gollwitzer, 1999). After exposure to an online petition campaign, individuals might form intentions to support the campaign presented to them. Both compassion and anger should influence intentions to support the petition (Lindsay-Hartz, 1984; Tangney, 1993). Intentions, however, are not always necessary mediators of behavior. Sometimes emotions drive immediate behavioral responses which are not caused by the fact that observers develop mental plans (i.e. intentions) to support the campaign. For this reason, we test the possibility that the impact of emotional reactions on supporting the petition is partially mediated by intentions.
In psychology, there is work demonstrating that both compassion (Goetz et al., 2010) and anger (Fischer and Roseman, 2007) are determinants of individual behavior. Anger is linked with aggressive behavior (Berkowitz and Harmon-Jones, 2004) and individuals experiencing anger will sign the petition because they will see this tool as an opportunity to punish the company (Carlsmithe et al., 2002). Consistent with past research on revenge (Grappi et al., 2013; Grégoire et al., 2010; Lindenmeier, et al., 2012), this emotion will drive both individual intentions and personal decisions to sign the petition online.

**H7:** Feelings of anger experienced after exposure to an online petition campaign have a positive influence on the intentions to support the petition.

**H8:** Feelings of anger experienced after exposure to an online petition campaign have a positive influence on the signing the petition online.

The link between compassion and behavior has been established in studies on charitable donations and pro-social behavior in general (Loewenstein and Small, 2007). Sweetin et al. (2013), found that individuals evaluating socially irresponsible brands sometimes wish to help the business become more ethical and responsible. Supporting an online petition campaign can be construed both as a form of helping the victims and the company and therefore consistent with the drive activated by compassionate responses.

**H9:** Feelings of compassion experienced after exposure to an online petition campaign have a positive influence on the intentions to support the petition.

**H10:** Feelings of compassion experienced after exposure to an online petition campaign have a positive influence on the signing of the petition online.

In addition, the stronger the intentions of an individual, the more likely they are to carry out that behavior (Ajzen, 1988). Thus it is expected that intentions to protest will increase the signing of the petition.
**H11:** Intentions to support an online petition campaign have a positive influence on signing of the petition online.

**Offline responses: The ‘afterlife’ of an online petition**

This study hypothesizes that aside from signing the online petition campaign, individuals exposed to the campaign may also engage in other offline behaviors in support of the petition. Offline negative word of mouth is a type of offline behavior that can result from the dual pathway described above and is used as a proxy to evaluate whether the campaign influences offline behavior.

Anger influences negative word of mouth both after product/service failures (Bougie *et al.*, 2003; Gelbrich, 2010) and following cases of irresponsible corporate behavior (Lindenmeier *et al.*, 2012; Romani *et al.*, 2013). According to emotion research, negative word of mouth is a coping mechanism aimed at reducing experienced stress with a situation (Gelbrich, 2010). Furthermore, spreading word of mouth is a goal directed action to obtain revenge and force the organization to change its behavior (Romani *et al.*, 2013).

The impact that compassion might have on negative word of mouth is unclear. It is possible that individuals will construe the spreading of negative communications as a form of helping behavior. In this case, compassion should lead to negative word of mouth. Sympathy explains incremental variance over and above the effect of anger when modeling negative word of mouth intentions (Antonetti and Maklan, 2016b). Furthermore, compassion can be an unpleasant emotion (i.e. with negative valence) when it is experienced following exposure to the suffering of others (Condon and Feldman Barrett, 2013). From this point of view, negative word of mouth could function as a coping mechanism in the same way previous research suggests for anger (Gelbrich, 2010).
**H12**: Feelings of anger experienced after exposure to an online petition campaign influence positively self-reported offline negative word of mouth against the corporation.

**H13**: Feelings of compassion after exposure to an online petition campaign influences positively self-reported offline negative word of mouth against the corporation.

Lastly, it is hypothesized that online support for the petition is a mediator of decisions to spread negative word of mouth offline. Behavioral change research demonstrates that pledging to do something is an effective device in driving behavior (see Vlaev and Dolan, 2015). Online petitions could therefore be more effective than alternative online tools (e.g. blogs, social media posts, online articles) because they have a built-in commitment device (i.e. the signature). In an off-line persuasion context there is evidence that asking people to express support is more effective than simply presenting information (Werner et al., 1995). Importantly, public expressions of commitment are more influential than private pledges (Cioffi and Gardner, 1996).

**H14**: Intentions to support the online petition campaign has a positive influence on self-reported offline negative word of mouth against the corporation.

**H15**: Signing the online petition campaign has a positive influence on self-reported offline negative word of mouth against the corporation.

**Methodology**

**Stimuli**

A stimuli-driven survey is adopted to test the research hypotheses. Participants reviewed one of four real online petition campaigns and answered a set of questions about them. The online survey software allocated the participant randomly to one of the four petition campaigns. All petitions were hosted by a campaigning organization ([http://sumofus.org/](http://sumofus.org/)) and participants clicked on a link embedded within the survey to access the petition. After
participants were exposed to the petition campaign, they returned to the survey and completed the questionnaire. Four different petitions were chosen to obtain feedback on a set of different campaigns. Obtaining feedback from multiple campaigns increases the generalizability of our model findings and avoids the risk that the specific company/campaign identified would influence the findings. In addition, to make the length of the survey manageable and avoid confusion in participants’ responding, we opted to show only one of the four petitions to each participant. All petitions: 1) present a controversial situation where a company is blamed, by the activists, for irresponsible behavior; and 2) identify potential victims of this behavior and discuss how corporate behavior has negatively affected them. The petition campaigns criticized different organizations operating in various industries: Unilever, LG, Nevsun and Monsanto.1

Procedures and participants

The model is tested on two separate studies. A cross-sectional study tests how cognitive and emotional predictors influence intentions to support the online petition campaign. Three hundred and one participants were recruited from Amazon Mechanical Turk (AMT) in exchange for monetary compensation. AMT is an established source of data for online studies (Buhrmester et al., 2011) and offers access to a diverse population (Paolacci and Chandler, 2014). One attention check question was positioned towards the end of the questionnaire. Ten participants failed the attention check and were deleted from the dataset leading to a total of 291 cases retained for analysis.2 All participants are US residents. 56% of the participants are male. In terms of age groups, 50% of participants are between 20 and 34 years old, 36% are between 35 and 54 years old and 14% are above 55 years old. There are no significant differences in terms of gender ($p = .75$) and age groups ($p = .86$) across the four petitions.

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1 An example of the campaign is available here: [http://action.sumofus.org/a/monsanto-royalties/?sub=homepage](http://action.sumofus.org/a/monsanto-royalties/?sub=homepage)

2 The findings of the study do not change if the participants who failed the attention check are included in the analysis.
A second study includes additional longitudinal measures of reported behavior. We conduct a longitudinal survey with two separate waves of data collection. Participants were recruited through Prolific Academic (www.prolific.ac), a panel provider for online surveys and experiments. All participants were British nationals currently residing in the UK. At time 1, participants were exposed to the online petition and answered questions on the cognitive scales and the emotional reactions to the campaign. The same campaigns were used in both studies (USA and UK) since they target global corporations and were written for an international audience. However, the two samples are entirely independent. Two hundred and two participants completed the first survey. Five participants failed to answer correctly to an attention check question and were therefore excluded from the second wave of the UK study. All remaining participants were invited, after two days, to complete a second survey were they indicated a) whether or not they had signed the petition campaign online and b) to what extend they engaged in offline negative word of mouth against the target company. Participants at time 1 were not warned about the upcoming second survey since this might have inflated the number of people signing the petition. Some participants might have guessed that signing the petition was a requirement for completing the second part of the study. At time 2 of the UK study, 156 valid responses were collected. 36% of the participants are male. A breadth of age groups is represented with 50% of participants between 20 and 34 years of age, 41% between 35 and 54 years old and 8% above 55 years old. The demographic profile in terms of gender \((p = .61)\) and age groups \((p = .98)\) is not dissimilar across the four petition campaigns.

**Measures**

All measurement items are based on existing scales, which are presented in Table 1. A pre-test \((N = 50)\) examined the psychometric properties of the items. Judgments of unfairness are measured through three items from Grégoire *et al.* (2010). Perceived similarity measures the closeness between the participants and the people affected by corporate behavior (Leach *et
The perceived likeability of the victims is assessed through a set of items borrowed from the literature on justice perceptions (Skarlicki et al., 1998). Perceived suffering is measured through the assessment of the negative emotions victims are expected to have endured (Leidner et al., 2010). Compassion and anger are measured on a list of words describing different feelings. Only in the UK sample, participants were contacted again two days after the initial survey and asked whether or not they had signed the petition (Yes, No, I can’t remember), their reasons for signing or not signing the petition online (open-ended comments) and whether or not over the last two days they had engaged in offline negative word of mouth (Grégoire et al., 2010). Only two participants stated that they could not recall whether or not they had signed. However, since they mentioned that they would be signing now they were classified as having signed the petition. The results are not affected if these participants are excluded altogether from the analysis. Overall 42 UK participants (27% of the sample) signed the petition (28 participants are female, 23 participants are between 18 and 34 y.o.; 16 participants are between 35 and 55 y.o.; three participants are 55 y.o. and above). Out of these 42 participants, 31 indicated an intention to support the petition (4 or above on the average of three items measured on a 7-point Likert scale). This is equal to 20% of the sample and suggests some bias in the self-reported behavioral measure.

The measurement model performs adequately in both US and UK studies. As illustrated in Table 1 all indicators yield Composite Reliability (CR) above .70 and Average Variance Extracted (AVE) above .50 thus indicating good reliability (Hair et al., 2011). Table 2 displays the root square of the AVE for all constructs as well as correlations between latent variables, demonstrating that the Fornell-Larcker criterion (Fornell and Larcker, 1981) is respected. Furthermore, the heterotrait-monotrait ratio is below one for both samples (highest value of .78 for the US sample and .73 for the UK sample) (Henseler et al., 2015). Overall these results suggest good discriminant validity across both samples. The Measurement Invariance of
Composite Models (MICOM) evaluation procedure (Henseler et al., 2016) was used to test for measurement invariance across the two countries/studies for common constructs. Partial measurement invariance was established suggesting that the standardized path coefficients can be compared across the two samples to test our hypotheses.

[INSERT TABLE 1 HERE]

[INSERT TABLE 2 HERE]

Common method bias (CMB)

Since some of the variables are measured in a cross-sectional design, the data could be potentially affected by CMB. To minimize potential effects of this bias all scales were randomized and participants were reminded frequently of the anonymity and confidentiality of their responses (Podsakoff et al., 2003). Furthermore, the choice of a longitudinal approach for the measurement of self-reported signing of the petition and negative word of mouth reduces CMB in the estimation of the dependent variables (Podsakoff et al., 2003). Results of a Harman single factor test, assessed through a principal component analysis with no rotation, showed that one factor explains 39% and 30% of the variance in the US sample and the UK sample respectively. This compares to six factors explaining 80% of the variance in the US sample and seven factors explaining 78% of the variance in the UK sample. These analyses suggest that CMB is not a threat in the interpretation of the results.

Findings

The four petition campaigns were rated similarly across US and UK samples. The four petition campaigns were rated similarly across US and UK samples. For the US, a one-way ANOVA reveals that the only significant difference between the four campaigns concerns ratings of anger (F (3, 290) = 4.43, p < .01) with the petition concerning Monsanto (M_{Monsanto} = 4.82) eliciting stronger levels of this emotion than the others (M_{Unilever} = 3.85; M_{LG} = 4.26; M_{Nevsun} = 4.68). Post-hoc tests with a Bonferroni correction show that only the comparison
between Monsanto and Unilever for the level of anger is statistically significant \( (p < .01) \). For the UK, a one-way ANOVA shows significant differences only in terms of victims’ suffering \( (F (3, 155) = 2.95, \ p < .05) \). The ratings for LG \( (M_{LG} = 6.6) \) are higher than for all other companies \( (M_{Unilever} = 6.12; \ M_{Monsanto} = 6.21; \ M_{Nevsun} = 5.94) \). Post-hoc tests using a Bonferroni comparison find that the level of perceived suffering is significantly higher for LG than for Nevsun \( (p < .05) \). Since there are no systematic differences between the campaigns in both samples, we decided to pool together the data in order to test our research hypotheses.

Table 3 shows the means for all constructs included in our model as well as differences in terms of age and gender groups. Females appear to react more strongly to the campaigns than males (especially in the US sample). Differences in terms of age groups are harder to interpret and, especially for the UK sample, they tend to be based on small sizes and thus should be considered with caution.

[INSERT TABLE 3 HERE]

In order to test our hypotheses, all four petitions’ evaluations are pooled together for each country’s sample, as the focus is the examination of relationships between constructs. A Partial Least Square (PLS) approach to Structural Equation Modeling (SEM) is adopted. PLS-SEM is increasingly popular in many disciplines (Hair et al., 2012; Hair et al., 2013) and represents an alternative paradigm to the use of covariance-based SEM. The former approach is preferable because the research has an exploratory focus and is more interested in prediction rather than theory testing. PLS-SEM estimation is more resistant to potential violations of normality than covariance-based SEM (Hair et al., 2011). PLS-SEM requires smaller sample sizes and our samples are in line with methodological guidelines (Hair et al., 2011). SmartPLS 3.0 and 5,000 bootstrap resamples are used for the measurement and structural model (Hair et al., 2011).
Figure 2 presents the estimated structural models for the US and UK studies, respectively. Broadly our conceptual model is supported. There is evidence of the dual pathway hypothesized. Perceived unfairness predicts anger as suggested in H1 while consistent with H2 and H3 perceived similarity between victims and observers drives both anger and compassion. H4 is only partially supported by the analysis since perceived suffering does not predict experienced anger in the UK sample. On the other hand, there is evidence in support of H5 since in both samples suffering influences compassion positively. H6 is also supported because victims’ likeability is an antecedent of compassion in both samples. Both emotional reactions have a positive effect on intentions to support the online petition campaign, consistently with H7 and H9. However, there is no evidence of a direct link between emotions and behavior since both H8 and H10 are unsupported. Consequently, intentions appear to mediate entirely the influence of anger and compassion on the decision to support the petition. There is also no evidence in support of H12 and H13, testing the link between emotions and reported offline negative word of mouth. Intentions to support the online petition campaign are however a significant predictor of the decision to sign the petition online and engagement in offline negative word of mouth (both measured at time 2). Results, therefore, support H11 and H14. Importantly, the decision to sign the petition online is associated with spreading offline negative information; consistent with H15.

The predictive power of our model is acceptable in both samples. For the US sample, the antecedents explain a moderate amount of variation ($R^2 = 42\%$) in the endogenous constructs (Hair et al., 2011). In the UK sample a moderate effect in terms of intentions to support the campaign ($R^2 = 44\%$) translates into a small effect on the signing of the online petition ($R^2 = 8\%$) and on reported offline negative word of mouth ($R^2 = 14\%$). Small effects are consistent with meta-analyses that have studied the link between intentions and actual behavior (Webb and Sheeran, 2006; Wood et al., 2015). To assess the predictive relevance of
the models, the Stone-Geisser’s $Q^2$ (Geisser, 1974) is calculated. All $Q^2$ values are higher than zero for all endogenous constructs, supporting the predictive relevance of the model for all latent constructs.

As a robustness check we examine whether the relationships in the model are affected by gender and age groups. We do so by running a PLS multi-group analysis (PLS-MGA) (Henseler, 2012). Since the sample size is not sufficient to consider three different age groups, we compare the model between participants who are from 18 to 34 years old and participants who are 35 and above. For the US sample, there is a significant difference in the relationship between perceived similarity and anger ($p = .025$). This path is much stronger for males ($\beta_{\text{male}} = .41, p < .01$) than for females ($\beta_{\text{female}} = .24, p < .01$). In terms of age groups, in the US sample there is a statistically significant difference in the path linking anger to intentions to support the petition ($p = .013$). The path is significant and strong for older participants ($\beta_{\text{older}} = .51, p < .01$) while it appears to be only marginally significant for younger participants ($\beta_{\text{younger}} = .18, p = .09$). In the UK sample, there is a statistically significant difference between male and female participants in relation to the path linking anger with the signing of the petition ($p = .001$). The path is significant for male participants ($\beta_{\text{male}} = .42, p < .01$) while not significant for female participants ($\beta_{\text{female}} = -.23, p = .11$). There are no significant differences between age groups on the UK sample. This evidence overall does not seem to indicate that the relationships tested in our model are reliably influenced by demographic variables.

To probe the mediations postulated by the model, an OLS regression approach to path analysis is adopted (Hayes, 2013) to estimate the indirect effects for all dependent variables. Table 4 presents the results of indirect effects estimated using PROCESS and the calculation of 95% confidence intervals using bias-corrected and accelerated bootstrap and 10,000 resamples (Hayes, 2013). The average of the items is used for the analysis. All positive indirect
effects are consistent with the hypotheses presented and tested through PLS-SEM. The only exception relates to the path linking perceived suffering to the signing of the petition that, albeit marginally, includes values below zero. This suggests that the effect through compassion is primarily driven by perceived similarity and victims’ likeability. We also conduct the same analysis including gender and age as covariates in the regression models. All results reported in Table 4 are robust to the introduction of these controls.

Finally, findings of the open-ended comments UK participants offered at time 2, on their motivations for signing/not signing the online petition campaign are reported. Table 5 offers a few representative quotes grouped around the dominant themes that emerge both for the signers and the non-signers. These two groups differ in their views on personal responsibility and perceived efficacy of the campaign. Furthermore, a lack of credibility often represents a barrier to generate online support among those exposed to the campaign.

[INSERT TABLES 4 AND 5 HERE]

Discussion

Implications for research

The paper examines the psychological processes underpinning reactions to online petition campaigns against corporations. The findings have implications for future research on online protest campaigns in general, and more specifically for online petition campaigns against businesses.

All cognitive appraisals identified (i.e. perceived unfairness, perceived victim’s similarity, perceived victim’s suffering, and victims’ likeability) influence online response in terms of intentions to support the online petition campaign, through anger and/or compassion. Perceived unfairness and similarity both affect signing the petition online through anger and intentions to support the petition, while perceived similarity and likeability affect signing the petition online through compassion and intentions to support the petition. Perceived suffering
appears to be a somewhat less important driver: it is the only cognitive appraisal that does not indirectly affect signing the petition online through compassion and it influences anger only in the UK study. One possibility for this result is that perceived suffering might influence anger and compassion only when the victims are perceived as similar to the self. Some qualitative comments suggest this possibility. One of the signers said that: “The story was very sad and could happen to any of us, its time us as humans put aside the differences we feel we have and actually learn to help one another as was intended for us to do”, while one of the non-signers said: “I personally feel rather detached from the issue of the petition.” This discrepancy may suggest that perceived suffering impacts anger and compassion only at high levels of perceived similarity. Further research can explore this potential moderation to assess further the role of perceived suffering.

Findings also support the view that anger and compassion are important emotional reactions to online petitions, which guide the formation of intentions to support the campaign. However, the effect of anger and compassion is entirely mediated by the intentions to sign the petition suggesting that effective campaigns need to trigger emotions which are strong enough to influence observers to create specific plans to support the petition. The ‘help’ and ‘punish’ pathways identified contribute to existing research by demonstrating that business protests are motivated by a mix of different motivations. Past research focuses predominantly on the role of anger as the primary driver of decisions to punish a deviant company (Romani et al., 2013). This paper demonstrates that a desire to help others influences decisions to participate in protests and shows that online petition campaigns can be effective communicative tools because of their ability to reinforce both emotional experiences (Martin and Kracher, 2008).

Online petition campaigns able to generate anger and compassion are potentially damaging for a corporation. Contributing to the ongoing debate about the ability of online activism to affect offline behavior (Dutta-Bergman 2006; Panagiotopoulos et al., 2011;
Cruickshank et al., 2010; Hale et al., 2013), there is evidence of moderate spill-over between signing of the petition online and the spreading of offline negative word of mouth. However, the findings show that these spill-over effects are limited and dependent on cognitive and emotional reactions. From this point of view, the findings are consistent with the idea that only a few online campaigns can be reasonably expected to generate significant offline impact (Hale et al., 2013; Watts and Wyner, 2011).

The evidence that signing the petition is an important driver for offline negative word of mouth raises interesting implications. It suggests that designing online platforms that facilitate the signing of the petitions online can be consequential in boosting the overall effectiveness of the campaign. Ceteris paribus websites that are more user-friendly and thus make the online signing of the petition easier, might also be most effective in driving spill-over to offline actions. The design of the platform is consequential not simply because it translates into a larger number of online signatures but because it facilitates offline campaigning too. This is consistent with behavioral change insights stressing the importance of public comments (Vlaev and Dolan, 2015). Future research should evaluate this mechanism in other behavioral contexts to explore further the connection between online commitments and offline behavior.

This paper develops a psychological account on the persuasiveness of online petition campaigns. The analysis moves beyond debates on the effectiveness of online tools (Fatkin and Lansdown, 2015; Hale et al., 2013) to focus on a more nuanced understanding of the features that make these tools persuasive on the basis of the psychological reactions they elicit. The ‘help’ and ‘punish’ pathways should remain important also in other online communication contexts that focus on purported injustices. For example, campaigns in support (or against) government policy might evoke similar reactions to those investigated in this research. It would be interesting to explore in future research whether or not the model identified explains support for online petitions in other applied contexts.
**Implications for practice**

Important implications for the design of online petition campaigns that can be persuasive in generating support for the campaign both online and offline are offered. First of all, the online petition needs to activate both identified pathways (i.e. help and punish) to increase online support and spreading offline negative word of mouth. To do so, petition campaigns need to be crafted carefully as to increase perceptions of unfairness, victim’s similarity and victim’s likeability.

Perceived similarity between the source and the targeted audience is a key driver of advertising persuasiveness (Aaker *et al.*, 2000). Communicators designing an online campaign, need to determine who is more likely to sign a specific petition prior to the release of the campaign. The same applies to increasing perceptions of victim’s likeability, which leads to compassion. Thus, a careful segmentation of the target audience is crucial for the success of an online petition.

Similarity has also been found to also increase trust (Berscheid, 1966). From the qualitative comments it is apparent that non-signers challenged or questioned the credibility of the information. Thus, increasing perceived victim’s similarity may increase trust in the information provided and transform some of the non-signers into signers.

Lastly, those individuals who signed the petition online were more likely to spread offline negative word of mouth offline. Externalizing their thoughts/intentions online may increase their commitment offline leading to negative word of mouth (Vlaev and Dolan, 2015). Consequently, the petition website should be designed to incentivize forms of public commitment from the user (e.g. share the signature on a social media platform).

Online petitions can lead to offline negative word of mouth (Martin and Kracher, 2008). Companies should monitor online petitions and engage in online communication crisis activities to counterbalance their effects (Coombs, 2007). For example, companies can use
apologies to communicate to affected customers their wrongdoing and reassure them that they are doing everything in their power to resolve the incident (Manika et al., 2015). Such a strategy could help companies faced with online petitions, avoid any long-term harmful effects on their activities and profits.

**Limitations and areas for further research**

The study presents a number of limitations. Firstly, the findings are influenced by the demographics of the two samples. It is unclear, for example, whether the same process will affect reactions to petitions in non-Western cultures. Since emotions are constrained by cultural factors (Markus and Kitayama, 1991), future research should explore whether the dual pathway model proposed here holds in other geographical contexts.

In order to obtain more representative answers, we measured reactions to four different campaigns. Nonetheless, the results might be affected by the nature of the stimuli examined and future research should test the generalizability of the model across a range of different petitions and especially campaigns with different features and communication styles from those examined here.

Our conceptual model did not include the link between victims’ likeability and anger as well as the path between perceived unfairness and compassion, although these were investigated post-hoc. Findings support the first exclusion, since the relationship between likeability and anger is not statistically significant in our samples ($\beta_{US} = -.54, p = .41$ and $\beta_{UK} = -.73, p = .31$). On the other hand, perceived unfairness of corporate behavior appears to predict compassionate responses ($\beta_{US} = .15, p = .04$ and $\beta_{UK} = .20, p = .009$). This finding appears somewhat counterintuitive because unfairness relates to corporate behavior while compassion is expected to be triggered by exposure to others’ plight (Goetz et al., 2010). It is possible, however, that an unfair behavior might be perceived as implicitly more harmful, hence eliciting higher compassion. Alternatively, it is also possible that this relationship might
be due to some structural association between anger and compassion, since the two emotions appear to be strongly correlated. Further research should examine this point further in order to clarify exactly the nature of the observed relationship between perceived unfairness and compassion.

The type of offline behavior examined is not costly and this might partly explain the spill-over effect identified in this research. Arguably, the spill-over will be reduced when campaigns ask to engage in offline behaviors that present significant costs (Kristofferson et al., 2014). Future research needs to examine the ability of our model to predict offline behaviors when more difficult and/or time consuming behaviors are considered. Moreover, our study is based on self-reports of behavior which might be somewhat inflated. Future studies would benefit from including measures of actual behavior.

Finally, this paper focuses on petitions that affect others in (relatively) distant communities. Future studies should consider to what extent the model might change in a situation where the individual is also directly affected by corporate actions. Research shows that anger is stronger in violations that affect the self (Batson et al., 2009) and this could influence the explanatory model proposed.
References


