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All click, no action? Online action, efficacy perceptions, and prior experience combine to

affect future collective action

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Abstract

Social media is increasingly used for social protest, but does internet-enabled action lead to 'slacktivism' or promote increased activism? We show that the answer to this question depends on prior level of activism, and on beliefs about the effectiveness of individual contribution to the collective campaign. Internet-enabled action was varied quasi-experimentally, with participants (n = 143) choosing whether or not to share a campaign on social media. Participants were then informed that sharing on social media had a big (high action efficacy) or small (low action efficacy) impact on achieving the campaign's goal. Prior levels of activism were measured before the experiment, and general levels of collective action were measured one week after the experiment. Taking internet-enabled action for one campaign increased future activism for other campaigns – but only in individuals who were already active and who perceived their actions to be an effective contribution to the campaign.

Keywords: collective action, activism, social media, slacktivism, participative efficacy

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Political leaders, organisations and individuals are increasingly using the internet to gain support for their cause. Nevertheless, the internet's ability to advance social change is widely debated. On the one hand, several large-scale protests, such as the Arab Spring uprisings, have been linked to online actions, particularly social media use (e.g., Lotan et al., 2011). Conversely, social media activism has been disparagingly characterised as 'slacktivism': low-impact action that derails future engagement and social change (e.g., Gladwell, 2010). Consistent with this latter view, recent experimental research suggests that online activism does produce a slacktivism effect, decreasing supplementary action, at least in the short-term for the same social issue (Schumann & Klein, 2015). However, does this detrimental effect of online activism generalise to affect broader patterns of engagement? In contrast to the slacktivism hypothesis, correlational and qualitative evidence suggests that online action can facilitate future action, for the same and other social issues, at least under certain circumstances. For example, internet-enabled action can promote future engagement for the same cause when it is used to express group identity and when it builds politicised identification (Kende, van Zomeren, Ujhelyi, & Lantos, 2016). However, the psychological processes that underlie the relationship between taking internet-enabled action for one cause and future engagement for other social issues remain untested (e.g., Bastos & Mercea, 2016). Therefore, the effect of online action on future engagement is an unresolved issue that the present study seeks to address.

Here, we extend research into the relationship between online action and higherthreshold (higher cost and/or risk) engagement by considering the impact of both past behaviour and perceived efficacy on subsequent behaviour. Previous literature examining the effect of information communication technologies on mobilisation has primarily been

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concerned with the structural affordances conferred by social media, for example for communicative networks and organising structures (e.g., Bennett & Segerberg, 2012; Walgrave, Bennett, Van Laer, & Breunig, 2011). However, there is limited knowledge about the social psychological effects of internet-enabled participation, which is our focus in the present study. Specifically, we test whether online social action in relation to one issue affects future engagement with other social issues. Although past behaviour and perceived efficacy are key predictors of behaviour in various settings (see Ajzen, 2005; Bandura, 1997), research is yet to examine whether they shape the extent to which online action mobilises engagement across different social issues. We therefore test whether perceived efficacy and prior experience with activism change the effect of online participation on cross-issue engagement.

1.1 The 'slacktivism' effect

Collective action is as a key strategy for social change (Ellemers, van Knippenberg, & Wilke, 1990). Historically, collective action has commonly involved high-threshold activities, such as strikes and boycotts, which are typically perceived as effective for advancing social change (Vaccari et al., 2015). However, collective action varies in form and effectiveness; Wright, Taylor, and Moghaddam (1990, p. 995) suggest that 'A group member engages in collective action anytime that he or she is acting as a representative of the group and the action is directed at improving the condition of the entire group'. With the ubiquity of the internet, early research was hopeful that technological advances would further advance social change (e.g., Shah, Cho, Eveland, & Kwak, 2005). Specifically, online forms of collective action, such as 'liking' a page on social media – also referred to as internet-enabled actions (e.g., Morozov, 2011) to acknowledge their physical footprint – are often seen as methods for mass mobilisation due to their low-threshold nature (Karpf, 2010). Consistent with this view, existing research has demonstrated that online participation can facilitate future collective action, at least under certain conditions (e.g., Kende et al., 2016).

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However, in contrast to this optimistic perspective, other researchers have characterised internet-enabled action as low-efficacy, token support or lazy activism (e.g., Christensen, 2011; Kristofferson, White, & Peloza, 2014; Morozov, 2011). The slacktivism hypothesis embodies this view, suggesting that internet-enabled actions inhibit future engagement (for a review, see Fuchs, 2014, Ch. 8). Consistent with the slacktivism hypothesis, Schumann and Klein (2015) found that engaging in online action inhibits offline participation for the same cause due to the feeling of making a satisfactory contribution to the group.

Although there are different types of internet-enabled action, here we are particularly concerned with the effect of political expression through social media. Our focus on political expression stands in contrast to more passive forms of internet-enabled action, such as accessing political information (Vaccari et al., 2015). It can also be contrasted to crowdsourcing approaches, such as micro-volunteering, where a task is divided into micro-actions and the Internet is used to recruit large numbers of people for informal and episodic volunteering to complete the larger task (e.g., Jochum & Paylor, 2013). There is some evidence to suggest that internet-enabled action in general – and political expression in particular – can enhance future engagement, at least in certain contexts. Vaccari et al. (2015) found that the more users acquired information and expressed themselves online, the more likely they were to engage in higher-threshold action. Although the process underlying this effect was not tested, they theorised that increased self-efficacy beliefs mediated this relationship. Meanwhile, Choi and Park's (2014) analysis of a Twitter community revealed that online communication can materialise into offline action for the same cause, particularly when it builds collective identity. However, they did not examine whether engagement for other social issues was affected. These findings suggest that the slacktivism hypothesis may underestimate the capacity of online participation to ferment future engagement, under the

right conditions. However, it remains unclear as to when online action will encourage future action, or how it affects collective action for other social issues.

Although previous literature has primarily examined the relationship between internet-enabled action and future participation for the same cause, technology's potential to foster engagement across multiple social issues has also been considered. Social movements can attract participants who are concerned about multiple social issues (e.g., Bennett, Givens, & Willnat, 2004). Research suggests that participation in collective action for more than one social issue can positively advance social change. For example, individuals who are currently engaged, or have a history of engagement, with more than one cause can provide important connections between issues, movements and groups. The ties created by these individuals can facilitate the spread of protest information to external communities and support mobilisation around global issues (e.g., Andersen & Jennings, 2010; della Porta & Mosca, 2007; Diani, 2003; Walgrave et al., 2011). Therefore there is substantial recent interest in the factors that support generalised political engagement (e.g., Bastos & Mercea, 2016; Louis, Amiot, Thomas, & Blackwood, 2016; Walgrave et al., 2011).

Previous research indicates that digital media confers certain structural affordances which can facilitate collective action across social issues. Bennett and Segerberg (2012) describe how digital technology has enabled individuals to mobilise via interpersonal and informal communication networks, rather than through the involvement of traditional social movement organisations. These 'connective action networks' (p. 750) are typically diverse, organised by technological processes, and require lower organisational costs than traditional forms of collective action. Importantly, Walgrave and colleagues (2011) suggest that participation in diverse, digitally-enabled communication networks such as these promotes collective action for multiple social issues. In particular, they found that the use of technology enabled activists to manage and stay in contact with different organisations and networks.

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Nevertheless, while this literature indicates that digital technology can provide important structural networks for activists which promote engagement with multiple social issues, it does not consider the psychological consequences of internet-enabled action for collective action participants and how this affects engagement for other issues.

Online participation for one cause could affect future engagement with other issues for several reasons: collective action participation can increase political knowledge, influence efficacy perceptions and build a generalised activist identity (Kinder, 1998; Louis et al., 2016). Accordingly, Bastos and Mercea (2016) identified a small number of prolific Twitter users who were highly engaged in multiple social issues, online as well as offline. However, serial activists are believed to be atypical. Moreover, scepticism exists about the potential of internet-enabled action to stimulate cross-issue engagement (e.g., Zuckerman, 2008). Rather than having a universal inhibition or facilitation effect, the effect of internet-enabled action on future engagement for other social issues may instead depend upon how participants perceive the efficacy of that online action (e.g., Drury & Reicher, 2005), and on their prior experience with activism (e.g., Brunsting & Postmes, 2002).

1.2 Participative efficacy

Efficacy beliefs are fundamental for a variety of human behaviour. In particular, beliefs about one's own ability to effect change are key for sustaining behaviour (Bandura, 1994). The importance of efficacy beliefs has been shown across several domains and behaviours (e.g. Condiotte & Lichtenstein, 1981; Devonport & Lane, 2006).

Similarly, efficacy evaluations are important for collective action (e.g., van Zomeren, Postmes, & Spears, 2008). Efficacy beliefs can refer to different objects, and of particular interest here is the perceived efficacy of a previous action. Van Zomeren, Saguy, and Schellhass (2013) suggest that increased perceptions about the efficacy of collective action can both inhibit and facilitate future action, depending on whether or not these perceptions lead to the belief that one's own participation will matter. Specifically, greater participative efficacy beliefs – or the belief that the self can make a difference through one's own contribution – are key to facilitating participation. Accordingly, research examining offline engagement demonstrates that although prior participation can motivate future action by increasing feelings of subjective power, this process will only occur when initial participation is perceived as effective (Drury & Reicher, 1999; 2005). However, it is unclear whether participation in low-threshold, internet-enabled action, can have similar consequences for self-evaluation.

The present study included a manipulation of the efficacy of an online action in order to test whether the effect of taking online action on action for other causes depends on the perceived efficacy of that prior action (H1). This is based on previous research which found that prior participation can motivate future action by increasing feelings of subjective power, but only when initial participation is perceived as effective (Drury & Reicher, 1999; 2005). Specifically, for individuals who engage in social action online, perceiving that action as having high (vs. low) effectiveness should facilitate future engagement by generating greater participative efficacy beliefs. In contrast, when prior participation is perceived to be ineffective, these beliefs are likely to be undermined and higher-threshold engagement inhibited (see Bandura, 1994).

Nevertheless, as the findings of Schuman and Klein (2015) indicate, the feeling of 'having made a difference' is also implicated in the slacktivism effect. The moderating role of action efficacy is thus in turn likely to be contingent on another critical moderating factor that has not been considered in prior work on the slacktivism effect: namely, prior experience with online activism.

1.3 Prior experience with activism

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Past behaviour is one of the strongest predictors of future behaviour (Ajzen, 2005). The frequency of past behaviour can predict the occurrence of future behaviour beyond wellfounded antecedents such as behavioural evaluations and intentions (e.g., Ouellette & Wood, 1998; Sutton, 1994). For instance, quitting smoking is predicted by the smoker's history of past cessation attempts (Cummings, Hellmann, & Emont, 1988).

Likewise, past history of activism is important for future mobilisation. In offline contexts, members of activist organisations tend to report greater levels of collective action participation (e.g., Brunsting & Postmes, 2002); likewise, individuals who identify as activists report increased intentions to engage in future action (Hornsey et al., 2006). Furthermore, past activism experience can produce psychological change which mobilises future action, increasing perceptions about the self's ability to generate change (Drury & Reicher, 2005; Drury, Evripidou, & van Zomeren, 2015) and contributing to a generalized activist identity which can motivate engagement in novel causes (Louis et al., 2016).

Although less research has examined whether prior activism experience affects the relationship between internet-enabled action and future engagement, studies examining how the internet affects civic and political participation have identified a key role for past behaviour. For example, although Xenos and Moy (2007) found that internet use facilitated offline political participation, this effect was enhanced in individuals who were already politically inclined. Likewise, Weber, Loumakis, and Bergman (2003) found that internet use only increased engagement in those who were already politically active.

In the present case, prior experience of online activism was predicted to moderate the interaction between taking online action, and efficacy beliefs. Specifically, the positive effects of perceiving one's own participation as effective are likely to be enhanced in those who have prior experience of online activism (e.g., Ajzen & Madden, 1986; Drury et al., 2015; Drury & Reicher, 2005). Thus, we expected online action – when perceived as

effective – to facilitate future engagement in those who typically engage in internet-enabled action (H2) (Weber et al., 2003; Xenos & Moy, 2007).

1.4 The present study

The present study aims to test when and why taking internet-enabled action in relation to one issue will inhibit or facilitate future collective action for other social issues. The effect of online action was expected to depend on prior online activism experience and the in-situ appraisal of the effectiveness of taking internet-enabled action. We tested these predictions in the context of a social media campaign to end domestic violence against migrant women. It is worth noting that we did not aim to study or recruit professional 'activists' already committed to protests (e.g., in the area of domestic violence, or migrant rights). Rather, any individual was able to participate in the study. Internet-enabled action was varied quasi-experimentally, in that participants chose whether or not to share the campaign on social media. They were then informed that sharing on social media has a big (high action efficacy) or small (low action efficacy) impact on achieving the campaign's goal. Prior levels of internet-enabled activism were measured before the experiment, and future collective action for other social issues was measured one week after the experiment.

2. Method

2.1 Design

The study employed a 2(action efficacy feedback: low vs. high) X 2(internet-enabled action: no action taken vs. action taken) X prior levels of online activism (continuous) between-participants quasi-experimental design. Data were collected in three phases: a screening questionnaire, a lab session, and a follow-up questionnaire one week after the lab session. All questionnaires were completed using online survey software.

2.2 Participants

A total of 147 participants were recruited via the host University's online participant recruitment system. One participant was excluded from analysis for not being a social media user, and three participants were excluded for indicating levels of typical online activism greater than four standard deviations above the mean. This left a final sample of 143 participants (28 male) whose ages ranged from 18 to 37 years (M = 19.94, SD = 2.84). Payment for the study was either £5 or partial fulfilment of undergraduate course requirements.

Regarding sample size and power, the average effect size of taking online action found by Schuman and Klein (2015) was $\eta^2 = .07$. Power analysis using g*power for the present design indicated that a sample of 107 would be sufficient to find an effect of this size (f = 0.27) with 80% power (alpha = .05). The sample of the current study is sufficient to detect an effect size of f = .236 ($\eta^2 = .053$) with 80% power.

2.3 Procedure and Materials

2.3.1 Cover story.

A cover story was employed to reduce demand characteristics. Participants were advised that the study was being run in conjunction with the 'STOP! Campaign' – a fictional campaign aiming to end domestic violence against migrant women – for two aims: to investigate psychophysiological responses to novel websites, and to provide feedback to improve the campaign's website. In an adaptation of the bogus pipeline technique (Jones & Sigall, 1971; Roese & Jamieson, 1993), an eye-tracking device and BIOPAC Systems respiratory effort transducer were utilised. We advised participants that we would record their psychophysiological data while they interacted with the website, and match this to their selfreport responses. However, the measuring equipment was not active and its purpose was simply to encourage honest responses. When questioned, no participant reported suspicion about the cover story's validity.

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2.3.2 Screening questionnaire.

Inclusion criteria were tested prior to the lab session, and included that participants needed to be a user of at least one of the social media platforms employed in the study (Facebook, Twitter, Tumblr).

2.3.3 Laboratory session.

Participants were tested individually in our laboratory. Participants were randomly allocated to either a high or low action efficacy feedback condition. After reading an information sheet which delivered the cover story, participants completed the premanipulation measures.

2.3.3.1 Pre-manipulation measures: Typical online activism.

Participants were asked to indicate how many minutes in a typical week they spend on campaign websites, and on using social media for campaign-related activity. Responses to both items were summed to form a scale (final sample: Min = 0, Max = 45; M = 5.58, SD = 7.90; before participant exclusion: Min = 0, Max = 100; M = 6.97, SD = 12.71).

2.3.3.2 Experimental procedure and manipulations.

Following the pre-manipulation measures, our bogus pipeline procedure was implemented. The psychophysiological equipment was attached to participants and configured. Participants were advised that they would be interacting with a website belonging to the STOP! Campaign. They were instructed to interact with the website naturally, as if they came across it in real life, and once finished to select a 'continue' button. The website included information about the campaign and a genuine opportunity to participate in internetenabled action by sharing an article about the issue on their own social media page. Whether or not participants shared the article was the basis of the quasi-experimental internet-enabled action variable (shared = action taken; not shared = action not taken). Participants received the efficacy manipulation after sharing the article on social media (high efficacy n = 17, low efficacy n = 19) or selecting the continue button without sharing the article (high efficacy n = 52, low efficacy n = 55). An on-screen message stated that supporting the campaign on social media would have a large (high efficacy) or small (low efficacy) impact on achieving the campaign's goal. The message contained an opportunity to engage in further action for this specific issue (signing a petition, signing-up to attend a demonstration, signing-up to write to an MP). Participants who took one or more of these actions were recorded as engaging in further collective action for the same cause (score as 0 = no further action taken; 1 = further action taken). Following this, when participants selected the continue button, post-manipulation measures were taken.¹

2.3.3.3 Post-manipulation measures: Participative efficacy.

Participants were asked to indicate, on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree), the extent to which they agreed or disagreed with two items adapted from van Zomeren et al. (2013): 'I believe that my contribution will help the group to end violence towards migrant women' and 'I believe that my individual effort will help the

¹ We acknowledge that we did not include a manipulation check for the action efficacy manipulation. This decision came after much deliberation. It was hard for us to imagine a manipulation check of action efficacy that: (1) wasn't close to the participative efficacy mediator, and (2) would be independent of the other IVs. We envisaged that the action efficacy manipulation would have a complicated effect depending on whether people took action or not, thus we expected that any manipulation check would be affected by whether people took the action or not. In our case, due to the difficulties of creating an action efficacy manipulation check that was independent to the effect of taking online action, we argue that a manipulation check would not have added value. In making this argument we follow both Fayant, Sigall, Lemonnier, Retsin, & Alexopoulos (2017) and Sigall and Mills (1998) who argue that manipulation checks aren't necessary to establish construct validity of causes and effects.

group to end violence towards migrant women'. Responses to each item were averaged to form a scale (r(141) = .53, p < .001) with higher scores indicating greater levels of participative efficacy (M = 3.83, SD = 1.30).

2.3.4 Follow-up questionnaire of longer-term, cross-domain engagement.

One week after the lab session participants were emailed a link to the follow-up questionnaire, in which participants were asked to indicate on a binary scale (yes = 1, no = 0) how many of a list of 20 online (e.g., 'signed an online petition') and 13 offline (e.g., 'attended a demonstration') collective actions they had engaged in for any cause in the previous week, after the lab session. Participants who answered "yes" to any item were asked to indicate, in a free-text field, the cause that the action was on behalf of.² Responses to each list were averaged to form two scales: one for online (Min = .00, Max = .70; M = .08, SD = .11) and one for offline (Min = .00, Max = .42; M = .05, SD = .07) collective actions. A composite scale was also computed by averaging responses to all items (Min = .00, Max = .52; M = .07, SD = .08). Condition means were used to compute scores for 10 participants who failed to complete the follow-up questionnaire. This was our key dependent variable. A complete list of all the variables assessed (which were not relevant to the present hypotheses) can be found in the supplementary material.

² For a summary of responses please see Supplementary Materials Table A. Eight participants indicated that they engaged in action on behalf of a cause that was in the same domain as the STOP! Campaign. All analyses were re-run removing these responses from the calculation of the longer-term, cross-domain engagement DV. Tests of hypotheses did not change qualitatively.

3. Results

3.1 Preliminary analysis

3.1.1 Randomisation check.

Randomisation checks revealed no significant differences between conditions in terms of age or gender, all Bs < 1.30, Fs < 2.19, ps > .096, $\eta_p^2 s < .03$. A 2(action efficacy feedback: low, high) X 2(internet-enabled action: taken, not taken) X typical online activism (continuous, mean centred) binary logistic regression indicated that non-completion of the follow-up questionnaire (0 = not completed, 1 = completed) was evenly distributed across conditions. All main and interaction effects were non-significant, all Bs < 0.74, ps > .274. Likewise, binary logistic regression revealed no relationship between typical online activism and self-selection into the internet-enabled action condition, B = .04, SE = .02, p = .116, Exp(B) = 1.04, 95% CI Exp(B) [.991, 1.084].

3.1.2 Immediate, same domain action.

To test whether participating in internet-enabled action (0 = no action taken, 1 = action taken) affected engagement in immediate, same domain action (0 = same domain action not taken, 1 = same domain action taken), binomial logistic regression was performed. The effect of internet-enabled action was significant: consistent with the slacktivism hypothesis, individuals who shared the campaign on social media were less likely to engage in immediate, same-domain action than those who did not share the campaign online, B = -.90, SE = .40, p = .026, Exp(B) = .41, 95% CI Exp(B) [.184, .897].

3.2 Main analysis

3.2.1 Longer-term, cross-domain action.

To test whether the effect of internet-enabled action on longer-term, cross-domain collective action depended on action efficacy and typical online activism, a 2(action efficacy feedback: low, high) X 2(internet-enabled action: no action taken, action taken) X 2(action

type: online, offline) X typical online activism (continuous, mean-centred)³ mixed ANOVA was conducted, with action type as the repeated-measures factor. Although the repeated-measures factor is not directly relevant theoretically, distinguishing between online and offline action in the analysis tests whether the pattern of effects is the same or different between the two media. Specifically, any interactions involving the repeated-measures factor would indicate that the pattern of effects is different for online and offline action.

The main effect of action type was significant, F(1, 135) = 9.79, p = .002, $\eta_p^2 = .07$, indicating that participants performed more online actions (M = .08; SD = .11) than offline actions (M = .06; SD = .07). Typical online activism was reliably associated with longer-term, cross-domain collective action, F(1, 135) = 24.24, p < .001, $\eta_p^2 = .15$. This was qualified by the three-way interaction between efficacy feedback, typical online activism and internet-enabled action, F(1, 135) = 11.53, p = .001, $\eta_p^2 = .08$. The effect of internet-enabled action on longer-term, cross-domain collective action thus depended on participants' typical levels of online activism and the action efficacy feedback they received. This interaction is illustrated in Figure 1 (top panel).

Further analysis indicated that the two-way interaction between action efficacy feedback and internet-enabled action was significant for those with high (*M* + 1*SD*) levels of typical online activism, F(1, 135) = 16.69, p < .001, $\eta_p^2 = .11$, but non-significant for those with low (*M* – 1*SD*) levels of typical online activism, F(1, 135) = 1.17, p = .281, $\eta_p^2 = .01$. In turn, the simple main effect of internet-enabled action was significant for individuals with mean and high (*M* + 1*SD*) levels of typical online activism in the high action efficacy condition, F(1, 135) = 4.43, p = .037, $\eta_p^2 = .03$ and, F(1, 135) = 19.49, p < .001, $\eta_p^2 = .13$

³ To correct for positive skewness, analyses were re-run using Tukey's ladder of power (Tukey, 1977) transformed typical online activism measure (see supplementary material). Findings for tests of hypotheses did not change qualitatively.

respectively. Specifically, taking internet-enabled action led to greater levels of longer-term, cross-domain action for participants with mean (M = .05, SE = .01 vs M = .09, SE = .02) to high (M = .06, SE = .02 vs M = .17, SE = .02) levels of typical online activism who also received high action efficacy feedback. In contrast, in the low action efficacy condition, the simple main effect of internet-enabled action was non-significant for individuals with low (M - 1SD) mean and high (M + 1SD) levels of typical online activism, F(1, 135) = .48, p = .487, $\eta_p^2 < .01$, F(1, 135) = .07, $p = .789 \eta_p^2 < .01$ and F(1, 135) = 1.29, p = .257, $\eta_p^2 = .01$ respectively.

Although all other main effects and interactions were non-significant, all Fs < 3.61, ps > .059, $\eta_p^2 s < .03$ (see Table 1), the simple main effect of internet-enabled action was in the direction of the slacktivism hypothesis for those with low (*M* - 1*SD*) levels of typical online activism in the high action efficacy condition (see Figure 1 for illustration).

3.2.1.1 Participative efficacy.

To examine the processes that underlie the conditional effect of internet-enabled action on longer-term, cross-domain collective action, a 2(action efficacy feedback: low, high) X 2(internet-enabled action: no action taken, action taken) X typical online activism (continuous, mean centred) between-participants ANOVA was performed on the participative efficacy scale.

Although the main effect of action efficacy was non-significant, F(1, 135) = 1.91, p = .169, $\eta_p^2 = .01$, the 2-way interaction between action efficacy feedback and typical online activism, F(1, 135) = 5.04, p = .026, $\eta_p^2 = .04$, and the 3-way interaction, F(1, 135) = 6.10, p = .015, $\eta_p^2 = .04$, were both significant. All other main effects and interactions were non-significant, all Fs < 1.23, ps > .250, $\eta_p^2 s < .01$. The effect of internet-enabled action on participative efficacy thus depended on participants' typical levels of online activism and the

action efficacy feedback they received. This interaction is illustrated in Figure 1 (bottom panel).

Further analysis indicated that the two-way interaction between action efficacy feedback and internet-enabled action was significant for participants with high (M + 1SD)levels of typical online activism, F(1, 135) = 5.66, p = .019, $\eta_p^2 = .04$, but not for participants with low (M - 1SD) levels of typical online activism, F(1, 135) = 1.61, p = .206, $\eta_p^2 = .01$. In turn, the simple main effect of internet-enabled action was significant in the high efficacy condition for people with high (M + 1SD) levels of typical online activism, F(1, 135) = 5.07, p = .026, $\eta_p^2 = .04$. Specifically, taking internet-enabled action (M = 5.03, SE = .38) compared to not taking internet-enabled action (M = 3.94, SE = .30) led to greater perceptions of participative efficacy. In contrast, in the low efficacy condition, the simple main effect of internet-enabled action was non-significant for people with high levels of typical online activism, F(1, 135) = 1.07, p = .303, $\eta_p^2 = .01$. Reframing these analyses in terms of the simple main effect of action efficacy feedback, this was significant for participants with high levels of typical online activism when they took internet-enabled action F(1, 135) = 10.67, p = .001, η_p^2 = .07. Specifically, when participants with high levels of typical online activism took internet-enabled action, receiving high (M = 5.03, SE = .38) compared to low (M = 3.39, SE = .35) action efficacy feedback led to greater perceptions of participative efficacy.

3.3 Moderated mediation analysis

To test whether participative efficacy mediated the conditional effect of internetenabled action on longer-term, cross-domain collective action, moderated mediation analyses were performed using Model 11 of PROCESS (Hayes, 2013). Specifically, this model tested whether taking internet-enabled action affects participative efficacy, which in turn predicts further action, with the internet-enabled action – participative efficacy path moderated by action efficacy and typical online activism; this model reflects the three-way interaction

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reported earlier. Bootstrap analysis — including the participative efficacy scale as the mediator — indicated a significant positive indirect effect of internet-enabled action on longer-term, cross-domain collective action for individuals with high levels of typical online activism in the high efficacy feedback condition, through greater feelings of participative efficacy: 95% CI [0.0020, 0.0438], indirect effect: 0.02, SE = .01, 10000 bias-corrected bootstraps. The indirect effect of internet-enabled action on longer-term, cross-domain collective action was non-significant under all other combinations of the moderators. The direct effect of internet-enabled action on longer-term, cross-domain also positive and significant 95% CI [0.0009, 0.0580], direct effect: 0.03, SE = .01, 10000 bias-corrected bootstraps; specifically, engaging in internet-enabled action facilitated longer-term, cross-domain action. The model is illustrated in Figure 2.

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4. Discussion

The relationship between internet-enabled action and future engagement has been widely debated in popular culture. Echoing this concern, recent research has considered whether participating in internet-enabled action facilitates or inhibits engagement in traditional and more demanding forms of collective action (e.g., Vaccari et al., 2015). However, limited research has tested the causal effects of online participation (for an exception see Schumann & Klein, 2015) or how online participation for one cause affects engagement across different social issues. In this study, we examined how internet-enabled action affects future action for other causes, extending previous literature by manipulating action efficacy perceptions and measuring subsequent collective action relating to different social issues. Findings indicate that participating in internet-enabled collective action can indeed affect longer-term, cross-domain collective action. However, rather than a universal facilitation or inhibition effect, the relationship between internet-enabled action and higher-threshold engagement is sensitive to prior activism experience and perceptions about the efficacy of the action taken.

Replicating previous literature (Schumann & Klein, 2015), we found that participating in internet-enabled action reduced willingness to engage in higher-threshold action for the same cause. This finding is consistent with the slacktivism hypothesis which suggests a demobilising role for online participation (e.g., Morozov, 2011). However, our results also extend this literature by demonstrating that internet-enabled action can in fact *facilitate* future collective action under specific conditions. In the longer-term, when participants had the opportunity to engage in action for other causes outside of the experimental setting, no detrimental effect of online participation occurred. On the contrary, taking internet-enabled action when participation led to greater participative efficacy beliefs.

This study makes a significant contribution to the debate over the effect of internetenabled action on subsequent collective action. Our findings demonstrate more specifically the conditions under which internet-enabled action can facilitate future action. For individuals who typically engage in internet-enabled action, taking an online action – when perceived as effective - mobilises future engagement for other causes. This result is consistent with previous literature observing a mobilising role for internet-enabled action (e.g., Choi & Park, 2014; Kende et al., 2016; Vaccari et al., 2015), and includes future collective action in both online and offline contexts. The present study also provides evidence for the psychological mechanisms behind this facilitation effect. Consistent with work examining enduring empowerment and participative efficacy in offline contexts (e.g., Drury & Reicher, 2005; van Zomeren et al., 2012) we found that greater participative efficacy beliefs partially mediated the relationship between taking online action and longer-term, cross-domain collective action. Although not statistically significant, our findings also contained patterns consistent with an inhibitory effect for internet-enabled action on cross-domain engagement for individuals with low levels of typical online activism. This pattern indicates that, under certain circumstances, there may be a potential for the slacktivism effect to persist into social action in other domains. Taken together, these findings suggest that internet-enabled collective action for one cause can affect future action for other social issues; however, when it leads to greater beliefs about the benefits of one's own participation, online action can perform an important facilitation role.

Regarding the implications of our research for organisations motivated to encourage activism, our findings also have relevance for platforms dedicated to promoting (and marketing) internet-enabled action. Platforms like MoveOn.org, change.org and thunderclap.it are digitally-networked spaces that host petitions and campaigns for multiple causes and social issues. Although the organisations responsible for these platforms have been criticised for promoting low impact action, over-simplifying issues and diverting attention from radical social movements (e.g., White, 2010), the platforms themselves can have a large user base, and are able to garner a high volume of support for different causes. Our findings may have particular relevance for organisations such as these, as they suggest that in addition to their work in marketing specific campaigns these platforms could play a strategic role in developing individuals who are concerned with multiple social issues by developing capacity building initiatives for their users.

In particular, our findings suggest that digital activism platforms could contribute to the development of self-evaluations that promote further activism by providing: (1) positive feedback after internet-enabled participation, and (2) opportunities for users to participate in other campaigns. Although many of these organisations already engage in marketing to promote new campaigns to platform users, these marketing communications typically focus on strategies that promote engagement within their own platform, rather than a longer-term or deeper commitment to socio-political issues in general (Karpf, 2016; White, 2010). Instead organisations involved in marketing digital activism could adapt their communications and design initiatives to facilitate higher-impact action, increased political interest and commitment, and the building of networks between their user-base and local social movement organisations. Specifically these initiatives could look to build key psychological antecedents, such as participative efficacy, which promote generalised engagement in activism. In this way, rather than engaging in practices that look to market social change – and potentially result in reduced political engagement (White, 2010) – these platforms could contribute to the building of individuals who are committed to social change.

4.1 Strengths, limitations, and future research

Key strengths of the present study relative to previous work are that it (1) employed realistic self-selection of whether to take internet-enabled action rather than enforced

participation; (2) directly manipulated the key situation-specific appraisal of action efficacy; and (3) employed a two time-point design to assess actual collective action taken in relation to a range of social issues outside of the experimental setting. Nevertheless, some limitations must also be borne in mind.

For one thing, self-selecting to partake in internet-enabled action meant that this was a quasi- rather than true manipulation, notwithstanding the increased realism and external validity that this provides. It should also be noted that we tested the effect of internet-enabled action on behalf of a very specific social issue, specifically domestic violence against migrant women. Rather than suggesting that sharing an article online makes our participants 'activists', our work highlights that even casual and every day actions, by individuals with relatively low levels of typical engagement, can have an important effect on self-evaluations which promote future engagement. We also acknowledge that we have taken a linear approach to the effect of internet-enabled action and that other effects occur. For example, engagement in physical protest can affect participation on social media and different types of engagement can be intertwined (e.g., Bastos, Mercea, & Charpentier, 2015). Similarly, there are other pathways to action and other methods for examining the effects of internet-enabled action (e.g., Bedeski, 2017; Sanborn, 2017; Soon & How, 2017). Unfortunately, examinations of other patterns of engagement were beyond the remit of the present study. Rather, the paper is designed to engage with an audience who are concerned with the effect of internet-enabled action on future engagement. Finally, we acknowledge that there was a small number of male participants. Ideally we would have liked to recruit equivalent numbers of male and female participants. However, we were limited by the demographics of the recruitment pool in that a much greater number of women are registered on the host University's participant recruitment system, which reflects undergraduate psychology as a discipline. Randomisation checks revealed that there were no significant differences between

conditions in terms of gender. So while there was a fewer number of men, there was no association between gender and assignment to experimental conditions.

More generally, future research is needed to examine when and how online participation for one social issue leads to sustained engagement for other causes. While the present study examined overall levels of cross-domain action, it did not test whether this action was part of a sustained commitment to the cause or a singular act. Online participation for one cause does not always lead to sustained engagement across multiple issues (Bastos & Mercea, 2016; Mercea & Bastos, 2016). Internet-enabled action that builds a generalised activist identity may be particularly beneficial for sustaining engagement with multiple social issues (Louis et al., 2016).

A further area for further research is the effect of internet-enabled participation on nonnormative collective action. The present study focused on moderate, normative action. However, internet-enabled action may also influence radical participation (e.g., Stuart, 2017). Prior online participation that is perceived as ineffective may play a role in promoting future action that is non-normative, particularly when feelings of contempt are increased and reconciliatory intentions reduced (Becker & Tausch, 2015; Saab, Spears, Tausch, & Sasse, 2016).

Although recent thought has been sceptical about the ability of the internet to mobilise collective action, our work emphasizes the potential role of lower-threshold actions for providing meaningful activism experience and a basis for participative efficacy beliefs. However, we also highlight that technologically-deterministic perspectives, which presume – either with optimism or pessimism – that technology directs society (Fuchs, 2014), are oversimplifications that ignore the social psychological economy of events. Although online participation may create feelings of satisfaction, inhibiting further engagement for the immediate cause (see Schumann & Klein, 2015), it may also provide an opportunity to build experience and participative efficacy perceptions which stimulate participation in other domains.

References

- Ajzen, I. (2005). *Attitudes, personality, and behavior*. Maidenhead, England: Open University Press.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453-474. https://doi.org/10.1016/0022-1031(86)90045-4
- Andersen, E. A., & Jennings, M. K. (2010). Exploring multi-issue activism. PS: Political Science & Politics, 43(1), 63-67. <u>https://doi.org/10.1017/S1049096510990604</u>
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopaedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.
- Bastos, M. T., & Mercea, D. (2016). Serial activists: Political Twitter beyond influentials and the twittertariat. *New Media & Society*, 18(10), 2359-2378.
 - https://doi.org/10.1177/1461444815584764
- Bastos, M. T., Mercea, D., & Charpentier, A. (2015). Tents, tweets, and events: The interplay between ongoing protests and social media. *Journal of Communication*, 65(2), 320-350. https://doi.org/10.1111/jcom.12145
- Becker, J. C., & Tausch, N. (2015). A dynamic model of engagement in normative and nonnormative collective action: Psychological antecedents, consequences, and barriers. *European Review of Social Psychology*, 26(1), 43-92. http://dx.doi.org/10.1080/10463283.2015.1094265

- Bedeski, R. (2017). The Korean state and candlelight democracy: Paradigms and evolution. *Journal of Contemporary Eastern Asia*, *16*(2), 82-92. doi: 10.17477/jcea.2017.16.2.082
- Bennett, W. L., Givens, T. E., & Willnat, L. (2004, April). Crossing political divides: Internet use and political identifications in transnational anti-war and social justice activists in Eight Nations. In *Paper for the European Consortium for Political Research Workshop*. *Uppsala, Sweden*.
- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739-768. https://doi.org/10.1080/1369118X.2012.670661
- Brunsting, S., & Postmes, T. (2002). Social movement participation in the digital age predicting offline and online collective action. *Small Group Research*, *33*(5), 525-554. https://doi.org/10.1177/104649602237169
- Choi, S., & Park, H. W. (2014). An exploratory approach to a Twitter-based community centered on a political goal in South Korea: Who organized it, what they shared, and how they acted. *New Media & Society*, *16*(1), 129-148. https://doi.org/10.1177/1461444813487956
- Christensen, H. S. (2011). Political activities on the Internet: Slacktivism or political participation by other means?. *First Monday*, 16(2). http://dx.doi.org/10.5210/fm.v16i2.3336
- Condiotte, M. M., & Lichtenstein, E. (1981). Self-efficacy and relapse in smoking cessation programs. *Journal of Consulting and Clinical Psychology*, 49(5), 648-658. http://dx.doi.org/10.1037/0022-006X.49.5.648

- Cummings, K.M., Hellmann, R., & Emont, S.L. (1988). Correlates of participation in a worksite stop-smoking contest. *Journal of Behavioral Medicine*, *11*(3), 267-277. https://doi.org/10.1007/BF00844432
- Della Porta, D., & Mosca, L. (2007). In movimento: "Contamination" in action and the Italian global justice movement. *Global Networks: A Journal of Transnational Affairs*, 7(1), 1-27. https://dx.doi.org/10.1111/j.1471-0374.2006.00154.x
- Devonport, T. J., & Lane, A. M. (2006). Relationships between self-efficacy, coping and student retention. *Social Behavior and Personality: an International Journal*, 34(2), 127-138. https://doi.org/10.2224/sbp.2006.34.2.127
- Diani, M. (2003). Introduction: Social movements, contentious actions and social networks.
 'From metaphor to substance'. In M. Diani & D. McAdam (Eds.), *Social movements and networks: Relational approaches to collective action* (pp. 1-20). Oxford: Oxford University Press.
- Drury, J., Evripidou, A., & van Zomeren, M. (2015). *Empowerment: the intersection of identity and power in collective action*. In D. Sindec, M. Barreto & R. Costa-Lopes (Eds.), *Power and identity (Current issues in social psychology)* (pp. 94-116). Hove, England: Psychology Press.
- Drury, J., & Reicher, S. (1999). The intergroup dynamics of collective empowerment:
 Substantiating the social identity model of crowd behavior. *Group Processes & Intergroup Relations*, 2(4), 381-402. https://doi.org/10.1177/1368430299024005

- Drury, J., & Reicher, S. (2005). Explaining enduring empowerment: A comparative study of collective action and psychological outcomes. *European Journal of Social Psychology*, 35(1), 35-58. doi:10.1002/ejsp.231
- Ellemers, N., van Knippenberg, A., & Wilke, H. (1990). The influence of permeability of group boundaries and stability of group status on strategies of individual mobility and social change. *British Journal of Social Psychology*, *29*(3), 233-246. doi:10.1111/j.2044-8309.1990.tb00902.x
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41(4), 1069-1097. https://doi.org/10.1177/0149206312455244
- Fayant, M.-P., Sigall, H., Lemonnier, A., Retsin, E., & Alexopoulos, T. (2017). On the limitations of manipulation checks: An obstacle toward cumulative science. *International Review of Social Psychology*, 30(1), 125–130. doi: http://doi.org/10.5334/irsp.102
- Fuchs, C. (2014). Social media: A critical introduction. London, England: Sage.
- Gladwell, M. (2010, October 4). Small Change: Why the revolution will not be tweeted. *The New Yorker*. Retrieved from http://www.newyorker.com/magazine/2010/10/04/small-change-malcolm-gladwell.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.
- Hornsey, M. J., Blackwood, L., Louis, W., Fielding, K., Mavor, K., Morton, T., ... & White,K. M. (2006). Why do people engage in collective action? Revisiting the role of perceived

effectiveness. *Journal of Applied Social Psychology*, *36*(7), 1701-1722. doi:10.1111/j.0021-9029.2006.00077.x

- Jochum, V., & Paylor, J. (2013). New ways of giving time: opportunities and challenges in micro-volunteering. Instituto for Volunteering Research; National Council for Voluntary Organisations. Nesta.
- Jones, E. E., & Sigall, H. (1971). The bogus pipeline: A new paradigm for measuring affect and attitude. *Psychological Bulletin*, *76*, 349-364. http://dx.doi.org/10.1037/h0031617
- Karpf, D. (2010). Online political mobilization from the advocacy group's perspective:Looking beyond clicktivism. *Policy & Internet*, 2(4), 7-41. doi:10.2202/1944-2866.1098
- Karpf, D. (2016). *Analytic activism: Digital listening and the new political strategy*. New York, NY: Oxford University Press.
- Kende, A., van Zomeren, M., Ujhelyi, A., & Lantos, N. A. (2016). The social affirmation use of social media as a motivator of collective action. *Journal of Applied Social Psychology*, 46(8), 453-469. doi:10.1111/jasp.12375
- Kinder, D. E. (1998). Opinion and action in the realm of politics. In D. Gilbert, S. Fiske, & G.Lindzey (Eds.), *Handbook of social psychology* (Vol. 2, 4th ed., pp. 778-867). Boston,MA: McGraw-Hill.
- Kristofferson, K., White, K., & Peloza, J. (2014). The nature of slacktivism: How the social observability of an initial act of token support affects subsequent prosocial action. *Journal* of Consumer Research, 40(6), 1149-1166. https://doi.org/10.1086/674137

- Lotan, G., Graeff, E., Ananny, M., Gaffney, D., Pearce, I., & Boyd, D. (2011). The Arab Spring the revolutions were tweeted: Information flows during the 2011 Tunisian and Egyptian revolutions. *International Journal of Communication*, *5*, 1375-1405.
- Louis, W. R., Amiot, C. E., Thomas, E. F., & Blackwood, L. (2016). The "Activist Identity" and activism across domains: A multiple identities analysis. *Journal of Social Issues*, 72(2), 242-263. doi:10.1111/josi.12165
- Mercea, D., & Bastos, M. T. (2016). Being a serial transnational activist. *Journal of Computer-Mediated Communication*, 21(2), 140-155. doi: 10.1111/jcc4.12150
- Morozov, E. (2011). *The net delusion: How not to liberate the world*. London, England: Penguin.
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124(1), 54-74. http://dx.doi.org/10.1037/0033-2909.124.1.54
- Roese, N. J., & Jamieson, D. W. (1993). Twenty years of bogus pipeline research: A critical review and meta-analysis. *Psychological Bulletin*, 114, 363-375. http://dx.doi.org/10.1037/0033-2909.114.2.363
- Saab, R., Spears, R., Tausch, N., & Sasse, J. (2016). Predicting aggressive collective action based on the efficacy of peaceful and aggressive actions. *European Journal of Social Psychology*, 46(5), 529-543. doi:10.1002/ejsp.2193
- Sanborn, H. (2017). Democratic participation under authoritarianism in Hong Kong and Singapore. *Journal of Contemporary Eastern Asia*, 16(2), 44-58. doi: 10.17477/jcea.2017.16.2.044

- Schumann, S., & Klein, O. (2015). Substitute or stepping stone? Assessing the impact of lowthreshold online collective actions on offline participation. *European Journal of Social Psychology*, 45(3), 308-322. doi:10.1002/ejsp.2084
- Shah, D. V., Cho, J., Eveland, W. P., & Kwak, N. (2005). Information and expression in a digital age modeling Internet effects on civic participation. *Communication research*, 32(5), 531-565. https://doi.org/10.1177/0093650205279209
- Sigall, H., & Mills, J. (1998). Measures of independent variables and mediators are useful in social psychology experiments: But are they necessary? *Personality and Social Psychology Review*, 2, 218–226. doi: https://doi.org/10.1207/s15327957pspr0203_5
- Soon, C., & How, T. T., (2017). All rants and no substance?: A new framework for studying the rationality of cyberspace. *Journal of Contemporary Eastern Asia*, 16(2), 20-43. doi: 10.17477/jcea.2017.16.2.020
- Stuart, H. (2017). *Islamist terrorism: Analysis of offences and attacks in the UK (1998-2015)*.London, England: The Henry Jackson Society.
- Sutton, S. (1994). The past predicts the future: Interpreting behaviour-behaviour relationships in social psychological models of health behaviour. In D. R. Rutter & L. Quine (Eds.), *Social psychology and health: European perspectives* (pp. 71-88). Aldershot, England: Avebury Press.

Tukey, J. W. (1977). Exploratory data analysis. Reading, MA: Addison-Wesley.

Vaccari, C., Valeriani, A., Barberá, P., Bonneau, R., Jost, J. T., Nagler, J., & Tucker, J. A. (2015). Political expression and action on social media: Exploring the relationship between lower-and higher-threshold political activities among Twitter users in

Italy. *Journal of Computer-Mediated Communication*, 20(2), 221-239. doi:10.1111/jcc4.12108

- van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, *134*(4), 504-535. http://dx.doi.org/10.1037/0033-2909.134.4.504
- van Zomeren, M., Saguy, T., & Schellhaas, F. M. (2013). Believing in "making a difference" to collective efforts: Participative efficacy beliefs as a unique predictor of collective action. *Group Processes & Intergroup Relations*, *16*(5), 618-634. https://doi.org/10.1177/1368430212467476
- Walgrave, S., Bennett, W., Van Laer, J., & Breunig, C. (2011). Multiple engagements and network bridging in contentious politics: digital media use of protest participants. *Mobilization: An International Quarterly*, *16*(3), 325-349. https://doi.org/10.17813/maiq.16.3.b0780274322458wk
- Weber, L. M., Loumakis, A., & Bergman, J. (2003). Who participates and why? An analysis of citizens on the Internet and the mass public. *Social Science Computer Review*, 21(1), 26-42. <u>https://doi.org/10.1177/0894439302238969</u>
- White, M. (2010, August, 12). Clicktivism is ruining leftist activism. *The Guardian*. Retrieved from https://www.theguardian.com/commentisfree/2010/aug/12/clicktivism-ruining-leftist-activism

- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, 58(6), 994-1005. http://dx.doi.org/10.1037/0022-3514.58.6.994
- Xenos, M., & Moy, P. (2007). Direct and differential effects of the Internet on political and civic engagement. *Journal of Communication*, 57(4), 704-718. doi:10.1111/j.1460-2466.2007.00364.x
- Zuckerman, E. (2008, February 8). Pros and cons of Facebook activism [Web log post]. Retrieved from <u>http://www.ethanzuckerman.com/blog/2008/02/08/pros-and-cons-of-facebook-activism</u>



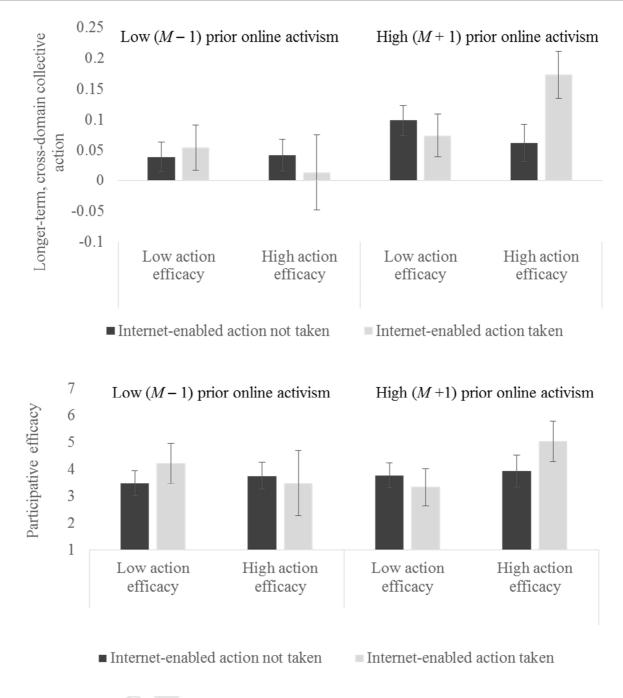
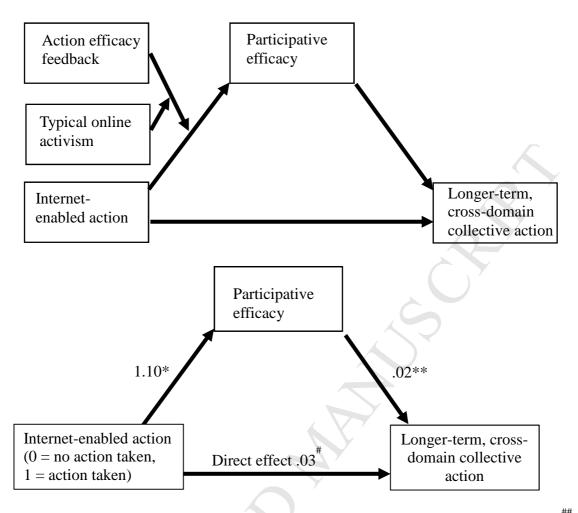


Figure 1. The effect of internet-enabled action on longer-term, cross-domain action (top panel) and participative efficacy (bottom panel) depends on typical online activism and action efficacy feedback. Error bars represent 95% confidence intervals.

Source	F	р	η_p^2
Internet enabled action	1.99	.160	.02
Action efficacy feedback	.22	.641	<.01
Typical online activism	24.24	<.001	.15
Action type	9.79	.002	.07
Internet-enabled action* Action efficacy feedback	3.07	.082	.02
Internet-enabled action* Typical online activism	3.48	.064	.03
Internet-enabled action* Action type	1.07	.303	.01
Action efficacy feedback* Typical online activism	3.61	.059	.03
Action efficacy feedback* Action type	.05	.820	<.01
Typical online activism* Action type	1.88	.172	.01
Internet-enabled action* Action efficacy feedback* Typical online	11.53	<.001	.08
activism			
Internet-enabled action* Action efficacy feedback* Action type	.47	.496	<.01
Internet-enabled action* Typical online activism* Action type	.11	.741	<.01
Action efficacy feedback* Typical online activism* Action type	.54	.463	<.01
Internet-enabled action* Action efficacy feedback* Typical online	.07	.800	<.01
activism* Action type			

Table 1. Internet-enabled action X Action efficacy feedback X Typical online activism X Action type mixed Analysis of Variance for longer-term, cross domain action. In each case df = 1, 135.



Conditional indirect effect: high action efficacy, M + 1SD typical online activism $.02^{\#}$

Figure 2. The effect of internet-enabled action on Longer-term, cross domain collective action through participative efficacy beliefs. Theoretical moderated mediation model (top panel) and path coefficients for participants with high (M +1 SD) levels of typical online activism in the high action efficacy feedback condition (bottom panel). All path coefficients are unstandardized regression weights. #95% CI [.0009, .0580], ## 95% CI [.0015, .0434], * 95% CI [.1333, 2 .0658], ** 95% CI [.0320, .2896].

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- We show online collective action for one cause can facilitate future action for other social issues
- We identify the conditions under which 'slacktivism' occurs and when a facilitation effect occurs
- We find that online action can inhibit future action for the same cause
- When perceived as effective, online action aids cross-domain action in those with more experience

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