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# Yes we can? Group efficacy beliefs predict collective action, but only when hope is high



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#### ARTICLE INFO ABSTRACT Surprisingly, hope is under-researched in contemporary social-psychological explanations of collective action Handling editor: Aarti Iver and social change. This may be because collective action research typically focuses on "high-hope" contexts in Keywords: which it is generally assumed that change is possible (the main appraisal of hope), and thus the main question is Collective action whether "we" can change the situation through collective action (i.e., group efficacy beliefs). This line of thought Group efficacy beliefs Hope implies that such beliefs should only motivate collective action when hope is high. To test this hypothesis, we conducted three experiments in contexts that were not "high-hope". In Study 1, conducted within the "low-hope" context of the Israeli-Palestinian conflict, we found that manipulated group efficacy beliefs did not increase individuals' collective action intentions. Studies 2 and 3 used the contexts of NHS privatization in the United Kingdom and Gun Control Reform in the United States --- contexts that were neither "low-hope" nor "highhope", which enabled us to manipulate hope and group efficacy beliefs together in one design. Consistent with our hypothesis, findings of both experiments revealed that group efficacy beliefs only predicted collective action when hope was high. Replicating Study 1, when hope was low, group efficacy had no effect on collective action intentions. We discuss our findings in light of the idea that only when hope for social change is established, the

be no basis for agency, which informs goal-directed action.

Collective action has long been recognized as a potentially powerful way in which change is promoted and implemented in societies, spanning from the French Revolution to the American Revolutionary War, and from the Civil Rights Marches to the Occupy Movements. Such collective action, however, does not typically arise spontaneously or out of the blue. Perhaps before all else, people need to be able to imagine the very possibility that the social world or order could and should be different (Tajfel, 1978; see also Ellemers, 1993). The emotional experience of this reflects the discrete emotion<sup>1</sup> of *hope* (Lazarus, 1991; Snyder, 1994; see also Bury, Wenzel, & Woodyatt, 2016), which is typically elicited by the cognitive appraisal that a meaningful goal is possible to achieve in the future (Averill, Catlin, & Chon, 1990; Lazarus, 1991). According to appraisal theories of emotion (Breznitz, 1986), emotions like hope arise when an event is appraised as relevant and important to an individual's concerns, which thus strengthens the mere cognitive perception of possibility and adds a motivational element, manifested in planning paths to achieve the desired goal (Stotland, 1969). As such, hope for social change in particular should reflect more than the mere perception that social change is possible (Thomas, McGarty, & Mavor, 2009), and for this reason should play an important role in the social psychology of collective action.

question of whether "we" can create change through collective action becomes relevant. Without hope, there can

Yet surprisingly, hope for social change is under-researched in this literature. We believe this is because scholars of collective action typically study either activists (whose very identity entails at least some hope; van Troost, van Stekelenburg, & Klandermans, 2013), or non-activists (i.e., sympathizers) within contexts in which social change already seems possible (e.g., as indicated by ongoing mobilization attempts by social movements; Van Zomeren, 2016). In either case, hope is implicitly or explicitly assumed to be a constant, perhaps even a prerequisite for collective action. As a consequence, the emphasis on what motivates non-activists in such contexts has been placed much more on individuals' *group efficacy beliefs*: the belief that the ingroup is able to achieve social change through unified action (Bandura, 2000; Hornsey et al., 2006; Klandermans, 1984, 2004; Mummendey, Kessler, Klink, & Mielke, 1999; Wright & Lubensky, 2009; for a review see Van Van Zomeren, Leach, & Spears, 2012). Indeed, such beliefs have been

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<sup>&</sup>lt;sup>1</sup> Discrete emotions differ from long-term sentiments, moods, and traits or dispositions in that they both targeted at a specific target (people, groups, or symbols), and are elicited by a specific event or context appraised as meaningful (Frijda, 1986; Lazarus, 1994).

identified as crucial for motivating engagement in collective action such that non-activists with stronger group efficacy beliefs are more likely to engage in collective action.

Importantly, this line of thought presumes that individuals with stronger group efficacy beliefs experience at least some hope for social change. Indeed, their belief that the group is *able* to potentially create social change already assumes that such change is perceived as possible to begin with. This makes it difficult to examine the unique role of hope within contexts that clearly reflect high hope for change, because presumably the relevant concern is no longer whether change is possible (the main appraisal of hope), but whether "we" can change the situation through collective action (i.e., group efficacy beliefs). However, at present we know little about whether group efficacy beliefs are still relevant when social change is not necessarily perceived as possible (i.e., when conditions for hope are not high to begin with). Indeed, if the pertinent question is whether social change is possible at all, then individuals may be less concerned with questions about having the agency to achieve it. We therefore focus in this article on contexts in which hope is not high, and among populations not necessarily imbued with hope (i.e., nonactivists), so as to allow a joint analysis of hope and group efficacy beliefs. Specifically, we propose that when hope for social change is high, group efficacy beliefs motivate collective action (e.g., Van Zomeren, Leach, & Spears, 2010). However, when hope for social change is low, group efficacy beliefs should no longer motivate collective action, as it may be irrelevant to consider the group's ability to create change without perceiving change as possible.

We put this line of thought to the experimental test in three studies among non-activists. Our main aim was to empirically test our hypothesis that group efficacy beliefs predict individuals' intention to engage in collective action when hope is high, but not when hope is low. We first chose a context in which hope would be clearly low and manipulated group efficacy beliefs (Study 1), followed by studies in two more ambiguous contexts, in which hope would be neither high nor low. This enabled the manipulation of hope as high or low, while crossing this manipulation with a group efficacy manipulation (Studies 2 and 3). As far as we know, these studies are the first to tease apart hope and group efficacy beliefs to test the motivating influence of group efficacy beliefs on collective action intentions at different levels of hope.

## 1. Yes we can?

A considerable body of research suggests that group efficacy beliefs are a positive predictor of individuals' motivation to engage in collective action, presumably reflecting a sense of collective agency for social change. Indeed, a meta-analysis conducted by Van Zomeren and colleagues (Van Zomeren, Postmes, & Spears, 2008) showed a positive, medium-sized relationship (mean effect size r = 0.34) between group efficacy and collective action across a diverse set of samples, collective action contexts, and issues. For instance, in Mummendey et al. (1999), East Germans' group efficacy beliefs predicted their intentions to engage in collective action to improve the status of their group after the German unification. Similarly, Van Zomeren et al. (2010) experimentally manipulated students' group efficacy beliefs and found it increased their collective action intentions against raising tuition fees in the Netherlands. Nonetheless, we suggest that for the belief that "we" can achieve social change through joint action to increase motivation for such action, there must be an underlying assumption of hope, conceptualized as the emotional experience elicited from perceived possibility of change (Cohen-Chen, Van Zomeren, & Halperin, 2015). For this reason, it is important to conceptually differentiate hope from group efficacy beliefs in the context of collective action.

We conceive of hope as a psychological resource that makes social change a desired, realizable goal, although hope alone does not tell us anything about the collective agency of a group of individuals to make change happen. This fits with findings indicating that hope leads to cognitive flexibility and creativity (Breznitz, 1986; Clore, Schwarz, & Conway, 1994; Isen, 1990; Lazarus, 1991). Furthermore, in intergroup conflicts, hope was associated with conciliatory attitudes (Cohen-Chen, Halperin, Porat, & Bar-Tal, 2014; Halperin, Bar-Tal, Nets-Zehngut, & Drori, 2008; Halperin & Gross, 2011; Moeschberger, Dixon, Niens, & Cairns, 2005), while experimentally induced hope was found to increase attitudinal change in conflict resolution (Cohen-Chen, Halperin, Crisp, & Gross, 2014; Cohen-Chen, Crisp, & Halperin, 2015, 2017; Leshem, Klar, & Flores, 2016) and openness to the outgroup (Saguy & Halperin, 2014). Thus, although the emotional experience deriving from appraising the possibility for a desired outcome — hope — seems to affect how individuals think about policies in society, it is not accompanied by beliefs about the agency needed for collective action to foster social change.

Such agency is precisely what differentiates hope from group efficacy beliefs. As a form of self-efficacy (Bandura, 1997), group efficacy beliefs include an agent (i.e., the group), an aim (e.g., social change), and an action (i.e., collective action), whereas hope includes only an aim (Averill et al., 1990; Stotland, 1969). In fact, if hope includes some form of agent, it tends to focus generally on the individual who feels it, rather than on the group that could act on it together. Furthermore, hope is relatively structural and can exist even when people do not have control over a situation (Bruininks & Malle, 2005), whereas group efficacy beliefs are relatively situational and agentic (Bandura, 1997) and actually serve as a way to gain control over a situation, for example through collective action. Thus, when people believe their group can achieve its goals through joint action, they experience the collective agency that is lacking when people merely feel hopeful.<sup>2</sup> It is precisely this sense of agency that motivates collective action (Van Zomeren et al., 2008).

This line of thought fits well with other lines of thought in the collective action literature, while contributing something important: That the perceived possibility of change is not merely a perception, but an appraisal that feeds into the emotional experience of hope. This is different from research that implicitly or explicitly examined perceptions regarding stability of structural relations, cognitive alternatives, and belief in the possibility of change (Abrams & Grant, 2012; Louis, 2009; McGarty, Bliuc, Thomas, & Bongiorno, 2009; Wright, 2009; Wright, Taylor, & Moghaddam, 1990). Indeed, Wright (2009) suggested, but did not test, that group efficacy becomes irrelevant when a social system is perceived as stable. This general line of thought derives from social identity theory (Ellemers, 1993; Tajfel, 1978), which suggests that collective action should occur only under societal conditions that enable individuals to imagine the possibility of a different future (Tajfel, 1978; see also Drury & Reicher, 2000; Ellemers, 1993; Mummendey et al., 1999; Van Van Zomeren et al., 2012). Therefore, our line of thought is compatible with this perspective, but conceptually we add that the cognitive appraisal of possibility for social change involves the motivational relevance thate (Frijda, 1986; Mackie, Devos, & Smith, 2000; Scherer, 1999). Indeed, this is why hope should be important to consider in the context of collective action, and why we suggest that if there is little hope for change to begin with, group efficacy beliefs should cease to predict collective action.

Against this backdrop, our perspective on hope and group efficacy beliefs also fits with and moves beyond more recent work. It fits with our line of thought about hope's motivational relevance, yet this work did not experimentally manipulate hope and group efficacy beliefs together in one design (which we do in two of the three experiments we

<sup>&</sup>lt;sup>2</sup> Although Snyder includes agency in his definition of hope as a cognitive motivational system (Snyder, 1994; Snyder et al., 1991), this definition does not account for situations in which the person or even group experiencing hope has little or even no control over the situation, which has been established as a fundamental characterization of hope (Averill et al., 1990; Stotland, 1969).

report below). In line with our perspective, Wlodarczyk, Basabe, Páez, and Zumeta (2017) identified hope as associated with collective action intentions in the context of M-15 movement in Spain. Similarly, Greenaway, Cichocka, Veelen, Likki, and Branscombe (2016) found that feeling hopeful in general (elicited by thinking about a hopeful aspect in participants' personal lives) increased support for social change through increased group efficacy. However, the current studies move beyond previous work as they are the first to experimentally test the effects of group efficacy beliefs in a low hope context (Study 1), and hope and group efficacy in conjunction in one experimental design (Studies 2 and 3), thus testing the motivational role of group efficacy beliefs on collective action intentions when hope is low rather than high.

# 2. The current studies

We conducted three experimental studies among non-activist samples in three different contexts that did not clearly reflect "high-hope" contexts. Study 1 (set within the Israeli-Palestinian conflict) was a clearly "low-hope" context in which we first established low levels of hope, and then manipulated group efficacy beliefs, expecting to find a null effect. Studies 2 and 3 used between-subjects factorial design in more ambiguous contexts of NHS privatization in the United Kingdom, and Gun Control Reform in the United States, both of which reflected neither high nor low hope, which enabled us to orthogonally manipulate both hope and group efficacy together in one design. We expected to replicate the null finding from Study 1 when hope was low, and to find a positive effect of group efficacy when hope was high.

Throughout these contexts, we manipulated the discrete emotion of hope for social change by inducing a belief in the possibility of a desired political goal in the future. This manipulation derives from the definition of the discrete emotion of hope as stemming from an initial cognitive appraisal, imbued with motivational relevance, that a positive change in a specific and currently negative situation is possible (Averill et al., 1990; Lazarus, 1991), as well as previous work using this manipulation (Leshem et al., 2016; Bury et al., 2016) as a proximal "event" that elicits hope. We manipulated group efficacy beliefs with a previously used manipulation (Van Zomeren et al., 2010). In all these studies, we report all manipulations, measures and exclusions.

In Study 1, we chose the context of the Israeli-Palestinian conflict, in which the possibility for change is difficult to imagine, and thus hope should not be high. In conflicts defined as intractable, peace as a desired goal together with the belief that the conflict is irresolvable (and thus without hope) are both prominent themes constructing the collective narrative as part of the "ethos of conflict" (Bar-Tal, 2007). Thus, we hypothesized that stronger group efficacy beliefs should not increase intentions for collective action. In Study 2, we chose the context of ongoing privatization of the National Health Service (NHS) in the UK because it was a rather ambiguous context with respect to hope for social change, and thus constituted a credible way of manipulating both hope and group efficacy beliefs. In Study 3 we chose the relevant context of gun reform in the US, especially in the aftermath of the heated debate raised by the Las Vegas mass shooting (October 1, 2017). This too enabled us to manipulate both hope and group efficacy beliefs within one experimental design. Furthermore, these two contexts enabled a comparison between previous findings within clear "high-hope" settings (finding a positive effect of group efficacy beliefs on collective action; Van Zomeren et al., 2010) with the findings of Study 1 in a context in which hope is not high.

# 3. Study 1

## 3.1. Participants and procedure

One hundred and three Jewish-Israelis ( $M_{age} = 42.50$ , SD = 14.79; 54% Male) were recruited using the online survey platform Midgam

Panel in return for £1. Sample size of above 100 participants was determined a priori using G\*Power (moderate Cohen d's effect size 0.5, power 0.8,  $\alpha = 0.05$ ). In terms of political orientation, the sample leaned to the right with 55% indicating they are Rightists, 30% Centrists, and 15% Leftists.

First, we wanted to establish that levels of hope were not high in this context. Therefore, we examined the baseline of hope for peace among our participants. Next, we manipulated participants' high (n = 55) versus low (n = 48) group efficacy beliefs ('According to the Israel Democracy... the Israeli people really have the ability to promote social change by engaging in action together... showed that collective action can (cannot) have a substantial effect on political outcomes relevant to Israel and Israeli society... In other words, collective action is the (not some sort of) road map for politicians and decision makers to understand what the people want, and clearly communicates what they want (and it merely adds to their confusion and misinterpretation)...'; see Appendix I for full text).

#### 3.2. Measures

In order to establish a baseline level of hope among our participants, we asked them 3 questions regarding their level of hope from 1 to 100 ('Please indicate, from 1-100, the level of hope you experience for the possibility of resolving the Israeli-Palestinian conflict at some point in the future'), their perception of the typical Israeli's level of hope for peace ('Please indicate, from 1-100, the level of hope you think the typical Israeli experiences for the possibility of resolving the Israeli-Palestinian conflict at some point in the future'), and their perception of the average Israeli's level of hope for peace ('Please indicate, from 1–100, the average level of hope in Israeli society for the possibility of resolving the Israeli-Palestinian conflict at some point in the future').

In order to examine whether our manipulation indeed induced group efficacy beliefs, we used a four-item scale based on Van Zomeren et al. (2010). Participants were asked to indicate their agreement from 1 (*absolutely disagree*) to 6 (*absolutely agree*) with the following items: 'I think Israel has the ability to resolve the conflict through unified action', 'I believe Israelis, as a group, can afford to take risks in the peace process, and deal with the challenges', 'The citizens of Israel have great strength as a group' and 'The citizens of Israel can create a big change in the conflict if they choose to' ( $\alpha = 0.77$ ).

Hope was measured using a five-item scale including both cognitive and affective components and has been established as a measure of hope in previous work (Beck, Weissman, Lester, & Trexler, 1974; Cohen-Chen et al., 2015, 2017; Cohen-Chen, Halperin, Saguy, & Van Zomeren, 2014), as it encapsulates the various elements of the discrete emotion of hope (including an expectation and possibility for a better future together with the positive affect regarding that future) based on appraisal theory (Breznitz, 1986). Participants were asked to indicate their agreement from 1 (absolutely disagree) to 6 (absolutely agree) with the following items: 'I feel hope regarding the possibility of resolution of the Israeli-Palestinian conflict', 'Under certain circumstances, and if all core issues are addressed, the conflict can be resolved in the future', 'It is clear to me that attempts to resolve the conflict are without hope', 'Israel should stop trying to resolve the conflict, because it is impossible' and 'I don't expect ever to achieve peace with the Palestinians' ( $\alpha = 0.89$ ).

Willingness to engage in collective action was measured using a 10item scale. Participants were asked to indicate from 1 (*Not at all*) to 6 (*completely*) to what extent they would be willing to engage in the following action: 'Addressing a politician or political party on social media', 'Joining a conflict resolution group on social media', 'Signing a petition', 'Participating in a demonstration', 'Organizing a demonstration', 'Joining an activity for conflict resolution', 'Taking part in a strike', 'Contributing to an organization for peace', 'Hanging a poster or

#### Table 1

Correlations between hope (pre manipulation), hope, group efficacy beliefs, and collective action.

	Mean (SD)	1	2	3
1. Hope (Baseline)	30.89 (22.30)	-		
2. Hope	3.33 (1.34)	0.64*		
3. Group efficacy beliefs	3.41 (1.14)	0.55*	0.75*	
4. Collective action	2.47 (1.01)	0.32*	0.54*	0.42*

\* Significant at the 0.01 level.

bumper sticker on your car/house', 'Advocating for peace in a social forum' ( $\alpha = 0.91$ ).<sup>3</sup>

# 3.3. Results

Means, standard deviations, and zero-order correlations are presented in Table 1.<sup>4</sup> Sensitivity power analysis yielded an effect size of 0.56, indicating that the minimal detectable effect was a medium-sized effect, and that we need to be cautious in interpreting the null effect (as small effects may not be detectable in the current study; Faul, Erdfelder, Lang, & Buchner, 2007). As expected, participants had relatively low hope for peace in the Israeli-Palestinian conflict (M = 30.89, SD = 22.30). Similar findings were found regarding perceived levels of hope the average Israeli experiences for peace (M = 30.76, SD = 24.06) and the perceived collective hope for peace in Israeli society (M = 33.01, SD = 23.53). This indicated that this is clearly not a highhope context.

Against this backdrop, we conducted a number of independent samples *t*-tests in order to examine the effect of the group efficacy manipulation on the manipulation checks of group efficacy beliefs and hope, as well as collective action intentions. First, the manipulation induced a stronger sense of group efficacy beliefs among participants in the high group efficacy condition (M = 3.71, SD = 1.07) compared to the low group efficacy condition (M = 3.11, SD = 1.02; t (101) = -2.63, p = .01, d = 0.57). Thus, the manipulation was successful in increasing group efficacy beliefs.

Furthermore, the manipulation had no significant effect on participants' level of hope for peace ( $M_{\rm HighEfficacy} = 3.46$ , SD = 1.37;  $M_{\rm LowEfficacy} = 3.19$ , SD = 1.31; t(101) = -0.99, p = .32, d = 0.20). Similarly, the manipulation had no significant effect on participants' willingness to engage in collective action ( $M_{\rm HighEfficacy} = 2.50$ , SD = 1.02;  $M_{\rm LowEfficacy} = 2.42$ , SD = 1.01; t(101) = -0.68, p = .49, d = 0.08).

Thus, Study 1 found that in a context in which hope is not high, inducing group efficacy beliefs did not increase the intention to act as a collective to promote change. These findings are in line with our prediction that group efficacy beliefs only predict collective action when hope is high, but did not yet test the hypothesis in full by experimentally varying both hope and group efficacy beliefs. In addition, the fact that our results were underpowered meant that we needed to cautiously interpret the null effect, adding importance to replicating these findings in subsequent studies within a two-way interaction. Thus, in Studies 2

and 3, we manipulated both hope and group efficacy in one experimental design, so that we could replicate the Study 1 findings, while also examining whether group efficacy beliefs predict collective action when hope is high (reflecting previous findings from the collective action literature). To this end, we chose a more ambiguous context with respect to hope for social change, which would enable us to manipulate hope and group efficacy together in one design.

## 4. Study 2

In Study 2 we chose an ambiguous context with respect to hope for social change, namely the process of privatization in the NHS in the United Kingdom. This setting offered the possibility of manipulating both hope and group efficacy beliefs. Specifically, we orthogonally manipulated hope (i.e., high vs. low possibility of reversing and changing policies and regulatory policies) and levels of group efficacy beliefs (i.e., high vs. low ability of British society to mobilize and create change through collective action). We expected participants in the high group efficacy condition to be significantly more willing to engage in collective action than those in the low group efficacy conditions, but only when hope was high. When hope was low, as in Study 1, we hypothesized that group efficacy would not affect willingness to engage in collective action.

## 4.1. Participants and procedure

One hundred and ninety six participants (*Mage* = 35.98, *SD* = 12.23; 48.5% Male) were recruited using the online platform Prolific Academic in return for £1.25. Sample size was determined a priori using G\*Power (effect size f = 0.25, power = 0.95,  $\alpha$  = 0.05).<sup>5</sup> Participants were filtered according to the following criteria: All were resident in the UK with English as their first language. Participants were recruited to take part in a study about 'Social attitudes relevant to current affairs in society'. In terms of political affiliation, 16% indicated they are conservative, 21% indicated they are centrists, and 63% stated they are liberal.<sup>6</sup> In terms of Socio-economic Status, 31% were below the average in the UK.

Participants first read a short text regarding the current state of NHS privatization in the UK ('*The NHS stands at a crossroads... In recent years, government reforms threaten both the way in which the NHS cares for people and the values it is founded on...).* Next, hope (high n = 95; low n = 101) was manipulated ('*in response, economic experts have indicated that the ambitious targets needed to reverse the privatization policies are <u>a real possibility (not a real possibility)</u> in the future. Policies are constantly (rarely) changed and reversed, even (especially) when they have been implemented in the public sphere and supported by the leadership...).* 

Lastly, group efficacy (high n = 96; low n = 100) was manipulated ('...according to the IPPR (Institute for Public Policy Research), the British people (do not) really have the collective ability to promote social change by engaging in action together. Importantly, these studies showed that collective action can have (does not have) a substantial effect on political outcomes, such as policy reversal and modification... In other words, collective action is the road map (is not some sort of road map) for politicians and decision makers to understand what the people want... clearly communicates what they want (merely adds to their confusion and misinterpretation)'; see Appendix I for full text).

 $<sup>^3</sup>$  We measured age, gender, and political orientation, but found that these variables did not affect our results. In addition, we included measures of group identification, intergroup emotions, and conciliatory attitudes for exploratory purposes, but they were not part of our hypotheses and are therefore beyond the scope of this paper.

<sup>&</sup>lt;sup>4</sup> In light of the high correlation between hope and group efficacy, we conducted a factor analysis using oblique rotation, which yielded a 2-factor solution (Eigenvalues above 1), but did not differentiate between hope and efficacy. While items 1 and 2 of the efficacy scale loaded onto the same scale as the hope items, item 3 loaded onto a separate scale and item 4 was inconclusive and loaded onto both scales similarly. Due to the fact that these scales have been established and used in past research (Bury et al., 2016; Leshem et al., 2016; Van Zomeren et al., 2010), we left them in their current form. However, we clarified the wording in subsequent studies and conducted further factor analyses.

 $<sup>^5</sup>$  Due to the relatively weak effect sizes found in Study 1, and since this was a 2  $\times$  2 design, we wanted to ensure we had sufficient power, and therefore increased the power from 80% to 95% in this study.

<sup>&</sup>lt;sup>6</sup> Although NHS privatization is an issue that is somewhat identified with Liberals (who were a majority in our sample), it is important to note that the NHS itself is an important institution in the UK, which is seen to some extent as a consensu issue by both liberals and conservatives. For example, in the run up to the 2017 elections, Prime Minister Theresa May stated the Conservatives' commitment to the founding principles of the NHS, and pledged policies to strengthen the NHS (England, 2017; Kettley, 2017).

## 4.2. Measures

Item wording was adjusted to the specific context. First, we wanted to examine whether our manipulations indeed had the intended effects.<sup>7</sup> **Hope** was measured using the same (albeit adjusted) scale used in the previous studies ( $\alpha = 0.82$ ). **Group efficacy** was measured using the same scale used in the previous study, although we clarified the wording of item 1 to refer to the 'citizens of the UK' rather than the country as a whole in order to strengthen agency. This improved the measure's reliability ( $\alpha = 0.93$ ).<sup>8</sup> **Willingness to engage in collective action** was measured using the same scale used in the previous studies ( $\alpha = 0.93$ ).<sup>9</sup>

# 4.3. Results

Means, standard deviations, and zero-order correlations are presented in Table 2. Here, sensitivity power analysis for interaction yielded a small effect size of 0.20, indicating that the minimal detectable effect was lower and thus improved from Study 1. Next, we tested whether our manipulations were successful using a one way ANOVA. Results showed that the hope manipulation indeed induced hope (*F*(1, 192) = 4.28, p = .04,  $\eta_p^2 = 0.02$ ). Participants in the high hope condition felt more hope (M = 4.20, SD = 0.74) compared to those in the low hope condition (M = 3.94, SD = 1.04). However, the group efficacy beliefs manipulation had no significant effect on hope (*F* (1,192) = 1.15, p = .28,  $\eta_p^2 = 0.01$ ), and there was no interaction effect of hope × group efficacy beliefs found (*F*(1, 192) = 1.28, p = .26,  $\eta_p^2 = 0.01$ ).

The group efficacy manipulation induced stronger group efficacy beliefs in the high group efficacy condition (M = 4.36, SD = 1.03) compared to the low group efficacy condition (M = 3.74, SD = 1.33; F(1,192) = 14.37, p < .001,  $\eta_p^2 = 0.07$ ). The hope manipulation had no significant effect on group efficacy beliefs (F(1,192) = 2.05, p = .15,  $\eta_p^2 = 0.01$ ), and there was no interaction effect of hope X group efficacy found (F(1, 192) = 1.23, p = .27,  $\eta_p^2 = 0.01$ ).

Testing our hypothesis for the first time in full, results showed a significant interaction effect of the two manipulations on collective action intentions, F(1,191) = 4.09, p = .04,  $\eta_p^2 = 0.02$  (Fig. 1). As predicted, when hope was high, participants in the high group efficacy condition (M = 3.93, SD = 1.26) were significantly more willing to engage in collective action compared to the low group efficacy condition (M = 3.27, SD = 1.17; Mean Difference = 0.65, SE = 0.25, p = .01, 95% CI 0.15, 1.15). This is in line with previous work demonstrating the effect of group efficacy beliefs on collective action intentions (Van Zomeren et al., 2010). By contrast, and in line with Study 1, when hope was low, there was no significant difference between the low group efficacy condition (M = 3.68, SD = 1.27) and the high group efficacy condition (M = 3.60, SD = 1.24) in terms of willingness to

#### Table 2

Correlations between hope, group efficacy beliefs, and collective action.

	Mean (SD)	1	2
1. Hope	4.07 (0.92)	_	
2. Group efficacy beliefs	4.05 (1.23)	0.67*	
3. Collective action	3.62 (1.24)	0.48*	0.48*

\* Significant at the 0.01 level.

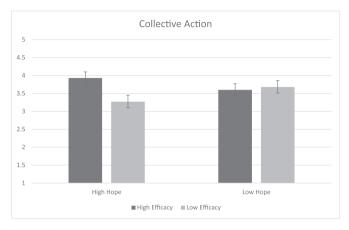


Fig. 1. Collective action intentions as a function of Hope X Efficacy. Error bars represent standard errors.

engage in collective action (Mean Difference = 0.06, SE = 0.25, p = .79, 95% CI -0.42, 55).<sup>10</sup>

Together, these results indicated that, in line with Study 1, group efficacy was not relevant for collective action intentions when hope was low. When hope was high, however, group efficacy induced more willingness to engage in collective action. As such, it seems that hope may be a prerequisite for non-activists' group efficacy beliefs to motivate collective action. To gather further support for our hypothesis, we aimed to replicate this finding in yet another context, in order to strengthen confidence in both the internal and external validity of our findings.

# 5. Study 3

Study 3 was conducted in the wake of the Las Vegas mass shooting, which took place October 1, 2017, and focused public debate in the United States on the issue of gun control reform. This heated and emerging context, which is in a continuous state of evolvement and extremely relevant, offered the opportunity of manipulating both hope and group efficacy beliefs. In this study we once again manipulated hope (high vs. low possibility of introducing gun control reform) and group efficacy (high vs. low ability of Americans to mobilize and create change through collective action). As in Study 2, we expected participants in the high (vs. low) group efficacy condition to be significantly more willing to engage in collective action, but only when hope was high; as in Studies 1 and 2, when hope was low, we hypothesized that group efficacy would not affect willingness to engage in collective action.

# 5.1. Participants and procedure

Two hundred and forty nine (Mage = 37.44, SD = 11.45; 48% Male) Americans were recruited to participate in a study about 'Social attitudes relevant to current affairs in society' using the online platform

<sup>&</sup>lt;sup>7</sup> As a comprehension check, we used a five-item scale with answers ranging from 1 (*absolutely disagree*) to 6 (*absolutely agree*), indicating that participants understood and absorbed the article's contents and message. These items were: 'When I read the article, I thought that: Solving the problem of NHS privatization is possible in the short-term', 'Solving the problem of NHS privatization' is possible in the short-term', 'Solving the problem of NHS privatization', 'It is clear how to solve the problem of NHS privatization', 'It is clear how to solve the problem of NHS privatization' ( $\alpha = 0.74$ ). Results showed that both the hope (F = 18.82, p < .001) and the efficacy (F = 13.93, p = .001) manipulations affected the comprehension check. However, no interaction effects were found (F = 0.55, p = .46).

<sup>&</sup>lt;sup>8</sup> Once again, we conducted a factor analysis between hope and group efficacy scales using oblique rotation. Results yielded a 2-factor solution, with hope and efficacy items loading onto separate factors (loading above 0.62).

<sup>&</sup>lt;sup>9</sup> We measured age, gender, socio-economic status (SES), and political orientation, but found that these variables did not affect our results. In addition, we included measures of individual efficacy, identification, intergroup emotions, and moral conviction for exploratory purposes, but they were not part of our hypotheses and are therefore beyond the scope of this paper.

 $<sup>^{10}</sup>$  No significant effects were found between high hope and low hope in either of the efficacy conditions, further establishing our predicted interaction pattern.

Amazon Mechanical Turk in return for \$1. The same sample size as the previous study was determined using G\*Power (effect size f = 0.25, power = 0.95,  $\alpha$  = 0.05). However, due to past experience with this specific platform which involved omitting a somewhat large number of participants who did not pay attention, we collected more responses than necessary. Participants were filtered according to the following criteria: All were Americans who had indicated they hold liberal political views.<sup>11</sup> In terms of Socioeconomic Status, 41% were below the average in the US, 49% were middle class, and 10% were above the average in the US.

Participants were asked to indicate their political orientation on economic and social issues, and were then told that their randomly chosen current affairs topic was gun control. At this point, participants answered a series of questions about their individual gun ownership, gun ownership intentions (current and past), and experience of gun violence (Stroebe, Leander, & Kruglanski, 2017). Participants then read a short text regarding the current state of Gun Control in US ('Compared to other developed countries, the US has far more guns... there are policies that are endorsed... to impose gun control reform... expanding background checks and preventing some people... from buying guns. Another is closing loopholes such as... gun shows and exhibitions. Most voters-including many Republicans-also support that sort of policy, but powerful pro-gun voices led by the National Rifle Association (NRA) block any such initiatives, based on the idea that people have an inalienable constitutional right to carry guns'). Next, hope (high n = 125; low n = 124) was manipulated using a similar text to the previous study, with adjustments to the current context. Lastly, group efficacy (high n = 125; low n = 124) was manipulated using a similar text to the previous study, with adjustments to the current context; see Appendix I for full text).

## 5.2. Measures

Item wording was adjusted to the specific context. Once again we examined the effects of our manipulations.<sup>12</sup> Hope was measured using the same scale used in the previous studies ( $\alpha = 0.85$ ). Group efficacy beliefs were measured using the same scale used in Study 2 ( $\alpha = 0.92$ ).<sup>13</sup> Willingness to engage in collective action was measured using the same scale used in the previous studies ( $\alpha = 0.95$ ).<sup>14</sup>

# 5.3. Results

Twelve participants were omitted from the analysis. Although we had filtered participants according to their political orientation, we included two measures of political orientation (economic and social) to check for sample characteristics and to ensure that our participants were indeed Liberals. Five participants indicated that they were conservative on social issues (which includes gun control), and were therefore not included in the analyses. In addition, we found that 7 participants answered reversed questions in the same way on more than one instance, indicating that they were consistently not paying attention and were not reading the questions properly.<sup>15</sup> Once again, the sensitivity power analysis yielded a small minimal detectable effect size of 0.18.

In terms of gun-related measures, 11% of participants indicated they own a gun, and 87% of participants know someone who owns a gun. Of gun-owning participants, 59% owned only one gun. Out of participants who do not own guns, 16% indicated they currently have intentions of purchasing a gun, while 42% stated that they had, at some point, considered purchasing a gun. When asked whether they had personally experienced gun violence, 7% indicated they had, while 28% knew someone else who had been affected by gun violence.

Means, standard deviations, and zero-order correlations are presented in Table 3.<sup>16</sup> Next, we tested whether our manipulations were successful using a one way ANOVA. In terms of the levels of hope participants experienced, results showed that participants in the high hope condition indeed felt more hope (M = 4.65, SD = 0.99) compared to those in the low hope condition (M = 4.03, SD = 1.04; F(1,233) = 21.74, p < .001,  $\eta_p^2 = 0.08$ ). However, the group efficacy manipulation had no significant effect on hope (F(1, 233) = 0.46, p = .49,  $\eta_p^2 = 0.002$ ), and there was no interaction effect of hope × group efficacy beliefs found on hope (F(1, 233) = 0.89, p = .34,  $\eta_p^2 = 0.004$ ).

In terms of group efficacy beliefs, the group efficacy manipulation indeed induced stronger group efficacy beliefs (M = 4.55, SD = 1.01) compared to the low group efficacy condition (M = 4.17, SD = 1.38; F (1,235) = 6.10, p = .01,  $\eta_p^2 = 0.03$ ). Here the hope manipulation also had a significant main (and thus independent) effect on group efficacy beliefs (F(1,235) = 4.52, p = .03,  $\eta_p^2 = 0.02$ ). Participants in the high hope condition experienced more group efficacy beliefs (M = 4.54, SD = 1.19) compared to those in the low hope condition (M = 0.4.20, SD = 1.21). Importantly, however, and as in the previous study, the interaction effect of hope × group efficacy on group efficacy beliefs was not significant (F(1, 235) = 3.41, p = .07,  $\eta_p^2 = 0.01$ ).<sup>17</sup>

Regarding collective action intentions, a significant interaction effect between the two manipulations was revealed, F(1, 233) = 4.66, p = .03,  $\eta_p^2 = 0.02$  (Fig. 2). When hope was high, participants in the high group efficacy condition (M = 3.58, SD = 1.34) were significantly more willing to engage in collective action compared to the low group efficacy condition (M = 3.03, SD = 1.44; Mean Difference = 0.55, SE = 0.27, p = .04, 95% CI 0.02, 1.08). By contrast, when hope was low, there was no significant difference between the low group efficacy condition (M = 3.35, SD = 1.50) and the high group efficacy condition (M = 3.09, SD = 1.53; Mean Difference = 0.27, SE = 0.27, p = .32, 95% CI -0.26, 0.79)<sup>18,.19</sup>

In sum, the Study 3 results replicated the findings of Studies 1 and 2,

<sup>17</sup> Although this is a trending finding, we consistently interpret marginally significant effects as non-significant

<sup>18</sup> The interaction remained significant when controlling for participants' gun ownership, intentions to purchase a gun, and past experiences with gun violence.

<sup>19</sup> Once again, no significant effects were found between high hope and low hope in either of the efficacy conditions, further establishing our predicted interaction pattern.

<sup>&</sup>lt;sup>11</sup> We used previous work as well as the mainstream narrative according to which one of the basic issues on which conservatives and liberals differ in the US is gun control (Graham, Haidt, & Nosek, 2009). We therefore felt that it was an appropriate assumption to use only Liberals for this study, and that they would be similarly supportive of gun control policies.

<sup>&</sup>lt;sup>12</sup> As a comprehension check, we used the same scale used in Study 2 ( $\alpha$  = 0.75). Results showed that both the hope (F = 24.22, p < .001) and the efficacy (F = 5.59, p = .02) manipulations affected the comprehension check. However, no interaction effects were found (F = 0.57, p = .45).

<sup>&</sup>lt;sup>13</sup> As in the previous studies, we conducted a factor analysis between hope and group efficacy scales using oblique rotation. Results yielded a 2-factor solution, with hope and efficacy items loading onto separate factors (loading above 0.58). Furthermore, it was important to us to establish an overall trend, indicating a differentiation between the hope and group efficacy measures. We therefore merged all three datasets and conducted an exploratory factor analysis with oblique rotation. This yielded a clear 2-factor solution (Eigenvalues > 1), with the group efficacy and hope items loading onto separate factors (loading > 0.63; cross loading < 0.27).

<sup>&</sup>lt;sup>14</sup> Once again, we measured age, gender, socio-economic status (SES), and political orientation. While age, gender, and SES did not affect our results, political orientation reduced the strength of our manipulation to marginally significant. However, the trends remained the same. In addition, we included measures of individual efficacy, identification, intergroup emotions, and moral conviction for exploratory purposes, but they were not part of our hypotheses and are therefore beyond the scope of this paper.

<sup>&</sup>lt;sup>15</sup> Of these participants, 4 had belonged to the high hope/low efficacy condition, 4 had belonged to the high hope/high efficacy condition, and 4 had belonged to the low hope/low efficacy condition.

<sup>&</sup>lt;sup>16</sup> In Study 1 we measured emotions toward Palestinians: anger, empathy, hostility, hatred, contempt, fear, compassion and anxiety. As well, we measured enthusiasm and optimism for peace. In Studies 2 and 3 we measured each emotion toward both the uk/us government and those specifically responsible for the NHS privatization/NRA (Anger, Hostility, Hatred, contempt, fear and anxiety). We also measured Enthusiasm and optimism. Across studies, no main effects and interactions were found on enthusiasm and optimism. As well, no consistent main effects or interactions were found on negative emotions.

#### Table 3

Correlations between hope, group efficacy beliefs, and collective action.

	Mean (SD)	1	2
<ol> <li>Hope</li> <li>Group efficacy beliefs</li> <li>Collective action</li> </ol>	4.33 (1.06) 4.36 (1.22) 3.26 (1.46)	- 0.63* 0.33*	0.41*

\* Significant at the 0.01 level.

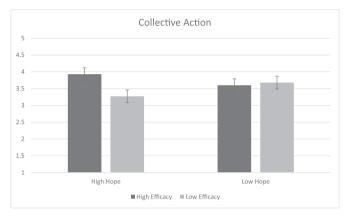


Fig. 2. Collective action intentions as a function of Hope  $\times$  Efficacy. Error bars represent standard errors.

demonstrating that manipulating group efficacy increased collective action intentions, but only when hope for change was high. When hope was low, group efficacy did not affect collective action intentions, as compared to the high hope condition. Although the main effect of the hope manipulation on group efficacy was unexpected in this study, it is important to note that this effect was only found in Study 3; furthermore, this main effect cannot explain the interaction effects we found across Studies 2 and 3 and hence we deem this unproblematic for the interpretation of these findings across the studies.

# 6. General discussion

The main aim of this research was to test whether group efficacy beliefs motivate collective action when hope is high, but not when hope is low. Findings of three experimental studies across different contexts showed support for our line of thought. Study 1 constituted a context that was clearly not high-hope, in which possibility for change was low; the structurally-fixed Israeli-Palestinian conflict. Consistent with our rationale, findings showed that manipulating group efficacy beliefs did not drive collective action intentions. Next, we conducted two studies in relatively ambiguous contexts with respect to hope for social change that allowed us to experimentally manipulate hope (manipulated as high vs. low possibility and tested using a hope manipulation check) and group efficacy beliefs together in one design. Study 2 was conducted in the context of privatization in the NHS in the United Kingdom, while Study 3 was run in the wake of the Las Vegas mass shooting, focusing on the topic of gun control reform in the United States. In both studies, findings revealed that the group efficacy manipulation had no effect on collective action intentions when hope was low, but increased such intentions when hope was high. This suggests that group efficacy beliefs motivate collective action when these are enabled by hope for social change. When hope is low, however, there seems little relevance or benefit to believing that "yes we can".

The current research makes a number of contributions to the social psychology of collective action. First, much work has established the role of group efficacy as a predictor of collective action (Bandura, 2000; Hornsey et al., 2006; Klandermans, 1984, 2004; Mummendey et al.,

1999; Wright & Lubensky, 2009; for a review see Van Zomeren et al., 2012), while hope was generally assumed (Tajfel, 1978; see also Ellemers, 1993) and often conflated with group efficacy beliefs. Importantly, recent work by Wlodarczyk et al. (2017) found that hope was positively correlated with collective action, although this correlational work could not establish any causal effects. Moreover, Greenaway et al. (2016) showed a positive effect of inducing a general hopeful mood and increased group efficacy. However, it is important to note that we conceive of hope as a discrete emotion (Lazarus, 1991, 1994; Snyder, 1994; see also Bury et al., 2016), elicited by cognitive appraisals in light of a specific context or event, rather than a trait or mood (Frijda, 1986). It is important to understand what motivates goal-directed collective action among people and societies, even if they do not have a tendency to experience hope in general. Thus, the current work is the first to establish the causal and interactive role of hope for change and group efficacy beliefs by manipulating both constructs simultaneously among non-activist populations.

Second, as previous work on group efficacy beliefs has been conducted in contexts where collective action is either ongoing or has a high potential to occur (Van Zomeren, 2013, 2016), change in these contexts seems possible and likely (see Bury et al., 2016). By conducting this research in contexts which include an inherent hope for change, such research has largely ignored contexts in which hope is not necessarily ideal for inducing collective action. Our findings extend knowledge about the antecedents of collective action (Van Zomeren et al., 2012) in such contexts by suggesting that the combination of high hope and group efficacy beliefs seems required to foster collective action. Put differently, hope seems to be a boundary condition, or prerequisite, for the motivational power of group efficacy beliefs in the context of collective action.

Third, another contribution lies in furthering our understanding of the emotion of hope. Up until now, the majority of research involving hope has generally examined its influence on attitudes or support for certain policies (Cohen-Chen et al., 2014, 2015; Halperin et al., 2008; Moeschberger et al., 2005; Saguy & Halperin, 2014; Leshem et al., 2016) rather than motivation for action. While some scholars assume that hope leads to motivation for action (Snyder, 1994), this has not been established empirically, particularly in group processes (and even more particularly in contexts in which the structure provides little hope for change; Jarymowicz & Bar-Tal, 2006). We suggest that while hope may provide the higher-order desirable goal (i.e., social change; Averill et al., 1990; Stotland, 1969), group efficacy beliefs provide the agent (i.e., the group) and the action (i.e., collective action) required to achieve that goal (Van Zomeren et al., 2008), and thus a sense of collective agency that hope does not provide. While previous research suggested that hope may be necessary for policy support of top-down change, the current findings meaningfully add that to promote and mobilize bottom-up changes, both hope and group efficacy beliefs are needed. As such, this research constitutes an important step in understanding what is needed to bridge the gap between hope's behavioral tendencies as energizing and goal-oriented (Breznitz, 1986; Clore et al., 1994; Isen, 1990; Lazarus, 1991), and actual motivation and mobilization processes toward achieving that goal through collective efforts.

Of course, this is not to say that this combination of high hope and group efficacy is easy to accomplish, and certainly not all contexts will lend themselves for collective action. In contexts embedding low possibility for change and therefore low hope, as demonstrated by Study 1, inducing group efficacy beliefs does not translate to intentions to engage in collective action. This suggests that the first step toward collective action in such contexts is to increase hope. This observation fits with recent calls for a stronger focus on social structure to understand the limits, or boundaries, of human agency through collective action (Van Zomeren, 2016). In more practical terms, the current findings suggest that social movements need to inspire group efficacy beliefs when there is hope, but first need to engineer hope in less hopeful contexts where possibility for change is not high. Mobilization messages should thus include both a possibility and collective agency component, if one wants to increase hope and group efficacy beliefs and thus the intention to engage in collective action. Two of the 2008 Obama slogans during his presidential campaign might be informative in this respect. A first — "Yes we can!" — seems more focused on the agentic component, whereas a second — "Change we can believe in" seems more focused on the possibility component. When looking at our current findings, we might speculate that perhaps the combination of the two was in part responsible for the success of that particular mobilization campaign.

This research also has a number of limitations. First, this work demonstrates the importance of inducing hope in order to enable group efficacy to motivate collective action. Nonetheless, it does not vet provide a practical solution for doing so in contexts where hope is not high, in which collective action and mobilization are desperately needed. One possible avenue may lie in utilizing an approach based on implicit theories about malleability (Chiu, Dweck, Tong, & Fu, 1997; Dweck, Chiu, & Hong, 1995). This approach has previously been found effective; manipulating malleability beliefs about conflicts indirectly induced hope (Cohen-Chen et al., 2014), while inducing malleability beliefs about groups increased efficacy (Cohen-Chen et al., 2014). Combining these two approaches in conjunction may prove effective in inducing both hope and efficacy, and therefore increasing intentions for collective action. It is also important for future work to better understand the psychological mechanisms through which hope and efficacy influence motivation for collective action.

Second, the use of self-reported intentions to take part in collective action as a dependent measure has been established as an indicator for actual behavior (De Weerd & Klandermans, 1999; Webb & Sheeran, 2006). However, this limits our ability to examine the full impact of our hypotheses and should be addressed in future work. Relatedly, a construct validity issue was found in Study 1. This served to improve the measures in subsequent studies, in which we empirically differentiate between hope and group efficacy. We also found a crossover effect of the hope manipulation on group efficacy in Study 3, although this main effect cannot explain the interaction effects we found across Studies 2 and 3. Indeed, in reality hope and efficacy can be strongly associated with one another, as has been established in previous data (Greenaway et al., 2016) as well as this current work, and perhaps cannot be considered completely orthogonal. Because they are conceptually distinct, and not fully dependent on one another, we believe it is particularly important to manipulate them in conjunction and examine their roles in motivating collective action orthogonally. However, it is important to further improve and sharpen these measures (and the differentiation between them) in future endeavors. Additionally, this paper joins emerging research that seeks to differentiate between conceptually similar yet separate psychological mechanisms, such as hope and optimism (Bury et al., 2016). We controlled for other future-oriented, energizing psychological mechanisms such as optimism and enthusiasm, but it is important to continue creating a full and comprehensive picture.

Lastly, another important issue is the fact that we focused on nonactivist samples in our studies. Research by Hornsey and colleagues (Hornsey et al., 2006) suggests that it is important for collective action researchers to recognize that activists and non-activists are not the same (see also Van Zomeren, 2015) and that research conducted with non-activists cannot speak to the motives and values of those whose engagement in collective action is more central to their identity (Blackwood & Louis, 2012; Louis, Amiot, Thomas, & Blackwood, 2016). This is, in our view, important because social movements typically need to reach out to non-activists in order to mobilize individuals for action. Future research can test constructs relevant specifically to activist populations, such as perceptions of hopeful persistence against all odds as a moral duty (Jasper, 2008; Van Troost et al., 2013).

In summary, this research revealed that group efficacy beliefs (the belief that the group can achieve social change through collective agency) matter to collective action intentions only when hope (the emotional experience of the perception that such change is possible) is high, but not when hope is low. These results offer an important boundary condition to the often-documented motivational effects of group efficacy beliefs, and illuminate the importance of further understanding and fostering what moves and motivates people for collective action in contexts in which hope cannot be taken for granted.

# Appendix I. Manipulations texts

# Study 1

According to the Israel Democracy Institute, which specializes on the topic of Israeli society and political and social change, the Israeli people really have the ability to promote social change by engaging in action together. The Israel Democracy Institute has been focusing on the effects and consequences of collective action in Israel, including demonstrations, petitions, strikes, volunteering, and other pro-social forms of behavior. A number of surveys and studies were conducted in recent years by the Institute among representative samples of Israelis to see whether engagement in such actions instigates political and social change. Importantly, these studies showed that collective action can (cannot) have a substantial effect on political outcomes relevant to Israel and Israeli society. The head of the IDI stated that there are 'many resources available to people who want to create change as long as they choose to use them, unite in a collective goal, and do so consistently over time.' ('not many resources an available to people who want to create change, even if they choose to use them, are united in a collective goal, and do so consistently over time.'). Furthermore, he stressed that political change can only take place if the people are behind their politicians, and that collective action demonstrates that people support the political direction (takes place *regardless* of whether the people are behind their politicians, and that collective action does not demonstrate that people support any political direction). In other words, collective action is the (not some sort of) road map for politicians and decision makers to understand what the people want, and clearly communicates what they want (and it merely adds to their confusion and misinterpretation). One example is the Israeli-Palestinian conflict. While many believe that it is ineffective for the people to communicate their attitudes and views on the Israeli-Palestinian conflict to the leaders, it is clear that the leaders are ultimately affected by these actions. Therefore, if a solution to the conflict is to come, it will come from the Israeli people's engagement in collective actions (While many believe that it is effective for the people to communicate their attitudes and views on the Israeli-Palestinian conflict to the leaders, it is clear that the leaders are ultimately unaffected by these actions. Therefore, if a solution to the conflict is to come, it will not come from the Israeli people's engagement in collective actions).

## Study 2

The NHS stands at a crossroads. For > 60 years, Britain has had a National Health Service that strives to be comprehensive, accessible and high value for money. In recent years, government reforms threaten both the way in which the NHS cares for people and the values it is founded on. The threat is based on the creation of a market for profit-driven companies that answer to shareholders instead of patients. This makes hospitals and health professionals, who have traditionally cooperated, compete with each other and with the private sector.

This leads to:

- Income and profits increasingly come before what is best for the patient.
- Inequalities in healthcare are getting worse. Units and even entire hospitals closures, job losses and bed closures.
- Even more of our money allocated to health is diverted to shareholders and company profits, and wasted on the costs of establishing and running a market which was not voted for, or agreed by the British public.

At this point hope (high vs. low) was manipulated using the

following text: In response, economic experts have indicated that the ambitious targets needed to reverse the privatization policies are <u>a real possibility (not a real possibility)</u> in the future. Policies are constantly (rarely) changed and reversed, even (especially) when they have been implemented in the public sphere and supported by the leadership. Model analysis suggests that it is possible (impossible) to bring back government responsibility, ownership and accountability, (with a likely chance of) halting harmful cuts and closures. In this case, a future including equal, affordable, and quality health care in the UK is truly conceivable (inconceivable).

Next, group efficacy beliefs (high vs. low) was manipulated using the following text: In addition (however/having said that), according to the IPPR (Institute for Public Policy Research), the British people (do not) really have the collective ability to promote social change by engaging in action together. IPPR has been studying the effects and consequences of collective action in the UK, including demonstrations, petitions, strikes, volunteering, and other pro-social forms of behavior. Importantly, these studies showed that collective action can have (does not have) a substantial effect on political outcomes, such as policy reversal and modification. The head of the IPPR stated that there are '(not) many resources available to people who want to create change as long as (even if) they choose to use them, unite in a collective goal, and do so consistently over time.' In other words, collective action is the road map (is not some sort of road map) for politicians and decision makers to understand what the people want regarding their healthcare system and the values that guide it, and clearly communicates what they want (and it merely adds to their confusion and misinterpretation).

## Study 3

## Some background on the issue of gun control

In 2014, the US population was 316 million people. Based on production data from firearm manufacturers, there were roughly 371 million firearms owned by private citizens and domestic law enforcement. Compared to other developed countries, the US has far more guns and far more mass shootings and gun deaths, including homicides, suicides, and accidents. In 2014, 68% of murders in the US were committed with firearms. In 2017, 9 mass shootings took place in the US, including the recent Las Vegas attack, which is the deadliest shooting in modern US history (58 killed).

Although no government can prevent gun-related killings, there are policies that are endorsed by both experts and regular citizens to impose gun control reform. The most clear-cut reform on the table is expanding background checks and preventing some people, like violent criminals, the mentally ill, and domestic abusers, from buying guns. Another is closing loopholes such as the ability to bypass background checks in gun shows and exhibitions.

A poll conducted this year by the *Wall Street Journal* found that > 80% of Americans support those proposals. Most voters—including many Republicans—also support that sort of policy, but powerful progun voices led by the National Rifle Association (NRA) block any such initiatives, based on the idea that people have an inalienable constitutional right to carry guns.

At this point hope (high vs. low) was manipulated using the following text:

Policy experts studying this matter have indicated that reducing gun violence by imposing gun control restrictions and policies at a state level is <u>(not) a real possibility</u> in the future. Policies are constantly being changed and updated (rarely reversed back to their previous state), even (especially) when they have been implemented in the public sphere and supported by the leadership. Model analysis suggests that it is (impossible) possible that such policies and regulations will be implemented successfully, with a likely chance of (and that) significantly reducing gun violence (is unlikely). In this case, a future including responsible gun ownership and increased safety is truly (inconceivable) conceivable.

Next, group efficacy (high vs. low) was manipulated using the following text: In addition, according to the IPPR (Institute for Public Policy Research), Americans (do not) have the collective ability to promote social change by engaging in action together. IPPR has been studying the effects and consequences of collective action in the US, including demonstrations, petitions, strikes, volunteering, and other pro-social forms of behavior.

Importantly, these studies showed that collective action (does not) can have a substantial effect on political outcomes, such as policy reversal and modification. The head of the IPPR stated that there are '(not) many resources available to people who want to create change, (even if) as long as they choose to use them, unite in a collective goal, and do so consistently over time.' In other words, collective action is (not) used as a road map for politicians and decision makers to understand what the people want when forming policy and values (it merely adds to their confusion and misinterpretation).

# References

- Abrams, D., & Grant, P. R. (2012). Testing the social identity relative deprivation (SIRD) model of social change: The political rise of Scottish nationalism. *British Journal of Social Psychology*, 51, 674–689.
- Averill, J. R., Catlin, G., & Chon, K. K. (1990). Rules of hope. New York, NY: Springer-Verlag.
- Bandura, A. (1997). Self-efficacy: The exercise of control. Macmillan.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. Current Directions in Psychological Science, 9, 75–78.
- Bar-Tal, D. (2007). Sociopsychological foundations of intractable conflicts. American Behavioral Scientist, 50, 1430–1453.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, 42, 861–865
- Blackwood, L. M., & Louis, W. R. (2012). If it matters for the group then it matters to me: Collective action outcomes for seasoned activists. *British Journal of Social Psychology*, 51, 72–92.
- Breznitz, S. (1986). The effect of hope on coping with stress. In M. H. Appley, & R. Trumbull (Eds.). Dynamics of stress: Physiological, psychological and social perspectives (pp. 295–306). New York, NY: Plenum.
- Bruininks, P., & Malle, B. F. (2005). Distinguishing hope from optimism and related affective states. *Motivation and Emotion*, 29, 327–355.
- Bury, S. M., Wenzel, M., & Woodyatt, L. (2016). Giving hope a sporting chance: Hope as distinct from optimism when events are possible but not probable. *Motivation and Emotion*, 40, 588–601.
- Chiu, C., Dweck, C. S., Tong, J. Y., & Fu, J. H. (1997). Implicit theories and conceptions of morality. Journal of Personality and Social Psychology, 73, 923–940.
- Clore, G. L., Schwarz, N., & Conway, M. (1994). Affective causes and consequences of social information processing. In R. S. WyerJr., & T. K. Srul (Eds.). *Handbook of social cognition* (pp. 323–417). Hillsdale, NJ: Erlbaum.
- Cohen-Chen, S., Crisp, R. J., & Halperin, E. (2015). Perceptions of a changing world induce hope and promote peace in intractable conflicts. *Personality and Social Psychology Bulletin*, 41, 498–512.
- Cohen-Chen, S., Crisp, R. J., & Halperin, E. (2017). Hope comes in many forms: Outgroup expressions of hope override low support and promote reconciliation in conflicts. *Social Psychological and Personality Science*, 8, 153–161.
- Cohen-Chen, S., Halperin, E., Crisp, R. J., & Gross, J. J. (2014). Hope in the Middle East: Malleability beliefs, hope, and the willingness to compromise for peace. *Social Psychological and Personality Science*, *5*, 67–75.
- Cohen-Chen, S., Halperin, E., Porat, R., & Bar-Tal, D. (2014). The differential effects of hope and fear on information processing in intractable conflict. *Journal of Social and Political Psychology*, 2, 11–30.
- Cohen-Chen, S., Halperin, E., Saguy, T., & Van Zomeren, M. (2014). Beliefs about the malleability of immoral groups facilitate collective action. *Social Psychological and Personality Science*, *5*, 203–210.
- Cohen-Chen, S., Van Zomeren, M., & Halperin, E. (2015). Hope(lessness) and (in)action in intractable intergroup conflict. In E. Halperin, & K. Sharvit (Eds.). *The social psychology of intractable conflicts - celebrating the legacy of Daniel Bar-Tal.* New York, NY: Springer Publishing.
- De Weerd, M., & Klandermans, B. (1999). Group identification and political protest: farmers' protest in the Netherlands. *European Journal of Social Psychology*, 29, 1073–1095.
- Drury, J., & Reicher, S. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology*, 39, 579–604.
- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychology Inquiry*, 6, 267–285.
- Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. *European Review of Social Psychology*, 4, 27–57.
- England, C. (2017, May 17). Conservative manifesto 2017: All you need to know about the Tories' election pledges. *The Independent*. Retrieved from www.independent.co. uk/news/uk/politics/conservative-manifesto-2017-all-need-know-key-points-toryelection-policies-theresa-may-a7743001.html.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior*

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Research Methods, 39, 175–191.

Frijda, N. H. (1986). The emotions. Cambridge, UK: Cambridge University Press.

- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96, 1029–1046.
- Greenaway, K. H., Cichocka, A., Veelen, R., Likki, T., & Branscombe, N. R. (2016). Feeling hopeful inspires support for social change. *Political Psychology*, 37, 89–107.
- Halperin, E., Bar-Tal, D., Nets-Zehngut, R., & Drori, E. (2008). Emotions in conflict: Correlates of fear and hope in the Israeli-Jewish society. *Peace and Conflict: Journal of Peace Psychology*, 14, 233–258.
- Halperin, E., & Gross, J. J. (2011). Emotion regulation in violent conflict: Reappraisal, hope, and support for humanitarian aid to the opponent in wartime. *Cognition and Emotion*. 25, 1228–1236.
- 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, 1701–1722.
- Isen, A. M. (1990). The influence of positive and negative affect on cognitive organization: Some implications for development. In N. L. Stein, B. Leventhal, & T. Trabasso (Eds.). Psychological and biological approaches to emotion (pp. 75–94). Hillsdale, NJ: Erlbaum.
- Jarymowicz, M., & Bar-Tal, D. (2006). The dominance of fear over hope in the life of individuals and collectives. *European Journal of Social Psychology*, 36, 367–392.
- married and controls. In art of moral protest: Culture, biography, and creativity in social movements. University of Chicago Press.
- Kettley, S. (2017). Conservative manifesto on NHS: What is the conservative NHS policy? *Express.* Retrieved from www.express.co.uk/news/politics/811163/General-election-2017-conservative-manifesto-NHS-policy.
- Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review*, 583–600.
- Klandermans, B. (2004). The demand and supply of participation: Social-psychological correlates of participation in social movements. *The Blackwell Companion to Social Movements*, 360–379.
- Lazarus, R. S. (1991). Emotion and adaptation. New York, NY: Oxford University Press.
- Lazarus, R. S. (1994). Universal antecedents of the emotions. In P. Ekman, & R. J. Davidson (Eds.). *The nature of emotion: Fundamental question* (pp. 163–171). New York, NY: Oxford University Press.
- Leshem, O. A., Klar, Y., & Flores, T. E. (2016). Instilling hope for peace during intractable conflicts. Social Psychological and Personality Science, 7, 303–311.
- Louis, W. R. (2009). Collective action—And then what? Journal of Social Issues, 65, 727–748.
- 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, 242–263.
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602–616.
- McGarty, C., Bliuc, A. M., Thomas, E. F., & Bongiorno, R. (2009). Collective action as the material expression of opinion-based group membership. *Journal of Social Issues*, 65, 839–857.
- Moeschberger, S. L., Dixon, D. N., Niens, U., & Cairns, E. (2005). Forgiveness in Northern Ireland: A model for peace in the midst of the "Troubles". *Peace and Conflict: Journal* of Peace Psychology, 11, 199–214.

- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, 76, 229–245.
- Saguy, T., & Halperin, E. (2014). Exposure to outgroup members criticizing their own group facilitates intergroup openness. *Personality and Social Psychology Bulletin, 40*, 791–802.
- Scherer, K. R. (1999). Appraisal theory. In T. Dalgleish, & M. J. Power (Eds.). Handbook of cognition and emotion (pp. 637–663). New York, NY, US: John Wiley & Sons Ltd. Snyder, C. R. (1994). The psychology of hope. New York, NY: Free Press.
- Stotland, E. (1969). The psychology of hope. San Francisco, CA: Jossey-Bass.
- Stroebe, W., Leander, N. P., & Kruglanski, A. W. (2017). Is it a dangerous world out there? The motivational bases of American gun ownership. *Personality and Social Psychology Bulletin*, 43, 1071–1085.
- Tajfel, H. E. (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. Academic Press.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Aligning identities, emotions, and beliefs to create commitment to sustainable social and political action. *Personality and Social Psychology Review*, 13, 194–218.
- Van Troost, D., Van Stekelenburg, J., & Klandermans, B. (2013). Emotions of protest. Emotions in politics (pp. 186–203). London: Palgrave Macmillan.
- Van Zomeren, M. (2013). Four core social-psychological motivations to undertake collective action. Social and Personality Psychology Compass, 7, 378–388.
- Van Zomeren, M. (2015). Collective action as relational interaction: A new relational hypothesis on how non-activists become activists. *New Ideas in Psychology*, 39, 1–11.
- Van Zomeren, M. (2016). Building a tower of Babel? Integrating core motivations and features of social structure into the political psychology of political action. *Political Psychology*, 37, 87–114.
- Van Zomeren, M., Leach, C. W., & Spears, R. (2010). Does group efficacy increase group identification? Resolving their paradoxical relationship. *Journal of Experimental Social Psychology*, 46, 1055–1060.
- Van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as "passionate economists" a dynamic dual pathway model of approach coping with collective disadvantage. *Personality and Social Psychology Review*, 16, 180–199.
- 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, 504–535.
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132, 249–268.
- Włodarczyk, A., Basabe, N., Páez, D., & Zumeta, L. (2017). Hope and anger as mediators between collective action frames and participation in collective mobilization: The case of 15-M. Journal of Social and Political Psychology, 5, 200–223.
- Wright, S. C. (2009). The next generation of collective action research. Journal of Social Issues, 65, 859–879.
- Wright, S. C., & Lubensky, M. E. (2009). The struggle for social equality: Collective action versus prejudice reduction. *Intergroup Misunderstandings: Impact of Divergent Social Realities*, 291–310.
- 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, 994–1003.