Explaining Normative Versus Nonnormative Action: The Role of Implicit Theories

Eric Shuman
Interdisciplinary Center, Herzliya

Smadar Cohen-Chen
Kellogg School of Management, Northwestern University

Sivan Hirsch-Hoefler
Interdisciplinary Center, Herzliya

Eran Halperin
Interdisciplinary Center, Herzliya

The current research investigates what motivates people to engage in normative versus nonnormative action. Prior research has shown that different emotions lead to different types of action. We argue that these differing emotions are determined by a more basic characteristic, namely, implicit theories about whether groups and the world in general can change. We hypothesized that incremental theories (beliefs that groups/the world can change) would predict normative action, and entity theories (beliefs that groups/the world cannot change) as well as group identification would predict nonnormative action. We conducted a pilot in the context of protests against a government plan to relocate Bedouin villages in Israel and a main study during the Israeli social protests of the middle class. Results revealed three distinct pathways to collective action. First, incremental theories about the world predicted hope, which predicted normative action. Second, incremental theories about groups and group identification predicted anger, which also predicted normative collective action. Lastly, entity theories about groups predicted nonnormative collective action through hatred, but only for participants who were highly identified with the group. In sum, people who believed in the possibility of change supported normative action, whereas those who believed change was not possible supported nonnormative action.

KEY WORDS: collective action, implicit theories, emotions, nonnormative action, anger, hatred, hope

The current decade has been characterized by mass social movements and collective action around the world, including the Arab Spring, the worldwide Occupy movement, mass demonstrations against excessive police force in the United States, and recently the Umbrella Revolution in Hong Kong. While these movements and protests have been largely peaceful and nonviolent, this decade has also witnessed radical and violent collective action, ranging from the more moderate, such as riots against austerity in Europe, to the extreme, such as terrorism in the Middle East. In part due to collective action's profound impact on the modern world, the question of why people engage in collective

action is the subject of growing social psychological research (e.g., Klandermans, 1997; van Stekelenburg, Klandermans, & van Dijk, 2009; van Zomeren, 2013; van Zomeren, Postmes, & Spears, 2008; van Zomeren, Postmes, Spears, & Bettache, 2011).

Antecedents of Collective Action

Social psychologists have recently sought to uncover the mechanisms underlying collective action by drawing on the study of social identity (Simon & Klandermans 2001; Tajfel & Turner 1979), group-based emotions (Christensen, Rothgerber, Wood, & Matz, 2004; Petersen 2002; van Zomeren et al., 2008), perceptions of injustice (Barlow, Sibley, & Hornsey 2012; Kelly & Breinlinger 1995), and sense of efficacy (van Zomeren et al., 2008). These lines of research have led to the development of numerous, concurrent models of the psychological antecedents of collective action, including a dual pathway emotion and efficacy model (Tausch et al., 2011; van Zomeren et al., 2004), the Social Identity Model of Collective Action (SIMCA; van Zomeren, 2013; van Zomeren et al. 2008), and a coping model (van Zomeren, Leach, & Spears, 2012). All of these models conceptualize emotional and efficacy paths to collective action based on social identity, which determines the relevance of the situation to the group and self. However, all these models have focused on explaining normative action, and very little research has examined how these factors may affect nonnormative action (for exceptions, see Becker, Tausch, Spears, & Christ, 2011; Tausch et al., 2011).

We argue that the common element of all of these theoretical approaches to normative action is that they all conceptualize collective action as an effort to *change* and improve the group's status (Wright et al., 1990; van Zomeren, Spears, Fischer, & Leach, 2004; van Zomeren et al., 2008; van Zomeren, Leach, et al., 2012). Therefore, we hypothesize that the key to understanding differing motivations for normative and nonnormative actions is people's beliefs about the possibility of change, namely their implicit theories (Dweck, 1999; Dweck, Chiu, & Hong, 1995; Rydell, Hugenberg, Ray, & Mackie, 2007). More specifically, a belief that change is possible (an incremental theory) should facilitate normative action in alignment with current models. However, a belief in the impossibility of change (an entity theory) should enable the emergence of nonnormative action under certain conditions.

To date, only one study (Tausch et al., 2011) has directly examined the antecedents of normative collective action versus nonnormative collective action. Normative action has been defined as a group act that is intended to affect public policy and conforms to the norms of the dominant social system, which could include laws and regulations, whereas nonnormative action violates these norms and rules and goes beyond the "acceptable" or "legal" (Wright, Taylor, & Moghaddam, 1990). This distinction is similar to those made between within-system and out-of-system political action (Sabucedo & Arce, 1991), activism versus radicalism (Moskalenko & McCauley, 2009), and constitutional versus extraconstitutional action (Hayes & McAllister, 2005). While normative action could refer to anything considered acceptable by the group, this is often operationalized as actions that are generally legal and thus accepted by most members of the group (Moskalenko & McCauley, 2009).

In their investigation of normative and nonnormative action, Tausch et al. (2011) used the dual pathway emotion and efficacy approach (van Zomeren et al., 2004), finding that normative and nonnormative actions were predicted by different discrete emotions, and high efficacy predicted normative action. Recent research by Cohen-Chen, Halperin, Saguy, and van Zomeren (2013) has shown incremental theories promote efficacy and thus normative action. Therefore as a follow-up to this research, we focused on the emotional side of the dual pathways to collective action (both which are still present in a more recent coping model; van Zomeren, Leach, et al., 2012), in order to better understand what psychological factors cause these different emotional reactions to the same situation and thus different types of action.

Specifically, in Tausch et al. (2011), normative actions were predicted by anger, whereas nonnormative actions were associated with contempt. Drawing from appraisal theories of emotion (e.g., Frijda, 1993; Roseman, 1984, 2001; Scherer, Schorr, & Johnstone, 2001), we argue that the reason these emotions led to different types of action is because they differ on whether the behavior of the emotional target is appraised as *malleable*. Anger is associated with the appraisal that the target can change: It tends to occur where there is some (perceived) control over the situation and results in approach actions aimed at correcting the target's behavior or the situation more generally (Averill, 1982; Fischer & Roseman, 2007; Halperin, Russell, Trzesniewski, Gross, & Dweck, 2011; Reifen-Tagar, Frederico, & Halperin, 2011). Conversely, contempt stems from the appraisal that the target is unchangeable: It is linked with low control of the target and associated with stable negative attributions of the target (Fischer & Roseman, 2007). Thus, anger was associated with normative actions, aimed at changing the outgroup's behavior or reforming the political system. On the other hand, contempt was associated with nonnormative actions directed at harming the outgroup or undermining the political system. Therefore, we propose that implicit theories are a key psychological variable that leads to different types of emotional reactions and thus different types of collective action tendencies.

The Role of Implicit Theories

There has been increasing recognition among psychologists that an individual's behavior is influenced by beliefs regarding the malleability of the self and others. Specifically, implicit theories are an individuals' beliefs regarding whether given targets, such as individuals (Dweck, 1999), groups (Rydell et al., 2007), conflicts (Cohen-Chen, Halperin, Crisp, & Gross, 2013) and the world (Dweck et al., 1995), are malleable (i.e., an *incremental* theory) or fixed (i.e., an *entity* theory). In the context of collective action, implicit theories about the world and groups are particularly relevant because collective action is often aimed at affecting the behavior of an outgroup and/or the broader political system (Cohen-Chen, Halperin, Crisp, et al., 2013; Cohen-Chen, van Zomeren, & Halperin, in press).

In this article, we propose that the *type* of implicit theory a person holds is related to different emotions and thus different action tendencies. Overall, implicit theories about the world should predict emotions whose target is the general situation, and implicit theories about groups should predict emotions about groups. More specifically, *incremental* theories about the *world*, that is, beliefs about the possibility of change in the world and the way its systems operate (Dweck et al., 1995), should facilitate normative collective action by promoting hope. Hope is a highly cognitive emotion that involves the expectation of and aspiration for a positive goal, as well as positive feelings about its achievability (Staats & Stassen, 1985; Stotland, 1969). Holding an incremental theory about the world should make it easier to conceptualize a possible goal of collective action, and increase feelings of its feasibility, thus facilitating hope for positive social change. Since appraisals leading to hope often focus on the situation in general (Lazarus, 1991) rather than a specific target, we hypothesized that it would be predicted by incremental theories about the world, rather than groups. For example, studies (e.g., Cohen-Chen, Crisp, & Halperin 2015; Cohen-Chen, Halperin, Crisp, et al., 2013) demonstrated that beliefs regarding change induce hope and support for peace. Relatedly, hope promotes normative collective action (Greenaway, Cichocka, Veelen, Likki, & Branscombe, 2014). Therefore, we predict that incremental theories about the world will predict normative collective action, and this relationship will be mediated by hope for positive social change.

On the other hand, implicit theories about *groups*, that is, beliefs about the ability of groups to change their behavior, have been found to affect emotions and attitudes directed at outgroups (Halperin, Russell, Trzesniewski, et al., 2011; Halperin, Crisp, Husnu, Dweck, & Gross, 2013; Rydell et al., 2007). In particular, *incremental* theories about groups (the belief that groups can change) should facilitate anger in the disadvantaged group and thus lead to normative collective action. The most basic appraisal of anger is of an injustice committed against one's own group, which should exist

in the disadvantaged group and is a prerequisite for collective action (Barlow et al., 2012; van Zomeren et al., 2008). However, anger has been differentiated from other negative emotions (e.g., contempt or hatred) by an appraisal that the outgroup's behavior can be changed and is not engrained within its innate negative characteristics (Averill, 1982; Fischer & Roseman, 2007). In the case of collective action, the emotion target is often the outgroup (or its representative). Thus, malleability beliefs about groups should facilitate appraising this target as malleable and as such should increase anger. Furthermore, anger is one of the most powerful emotional motivators of normative action (Carver & Harmon-Jones, 2009; van Zomeren, 2013). Therefore, by facilitating group-based anger, incremental theories about groups should drive support for normative forms of collective action.

Alternatively, we contend that *entity* theories about groups (beliefs that groups cannot change their nature) would be linked to more destructive emotions, further leading to nonnormative action. In particular, entity theories have been found to facilitate hatred appraisals (Halperin, Russell, Trzesniewski, et al., 2011), such as stable negative characteristics and an inability to change the negative nature in the outgroup (Halperin, 2008). Further, hatred has been linked to action tendencies such as harming the outgroup and acting violently (Halperin, 2008), action tendencies that are considered nonnormative. Thus, entity theories about groups should predict nonnormative action by increasing hatred toward the outgroup.[1]

The current study aims to expand on the research of Tausch et al. (2011) which investigated the psychological antecedents of normative versus nonnormative action. This work focuses on the emotional pathway to collective action and posits that differing emotional reactions are driven by different types of implicit theories and thus lead to different types of action. Specifically, we hypothesize three distinct pathways to collective action stemming from implicit theories. First, we contend that hope will mediate the relationship between incremental beliefs about the world and normative collective action. Second, the relationship between incremental theories about groups and normative collective action will be mediated by anger. Third, hatred will mediate the relationship between entity theories about groups and nonnormative collective action.

Pilot Study

Since hatred has not yet been considered in the context of collective action and often empirically co-occurs with anger (Halperin, 2008), we first ran a brief pilot study to test our hypotheses regarding anger and hatred as predictors of normative and nonnormative action and to empirically differentiate anger and hatred in the context of collective action. This study was conducted in the context of ongoing protests to a governmental plan—the Prawer Plan—that could have led to the displacement of tens of thousands of Palestinian Bedouin. The plan was officially aimed at resolving the outstanding issues of land ownership between the Bedouin and the State of Israel, but it was criticized by Palestinians as being discriminatory, one-sided, and harmful. As a result, it generated a large mobilization of the Palestinian community within Israel against the plan.

Method

Participants and Procedure

Two hundred and seven Palestinian participants (114 females; five missing; ages 17–65, $M = 29.37$, $SD = 10.82$) completed a brief survey about the current movement against the Prawar Plan. This sample included both Bedouin ($N = 58$) and non-Bedouin ($N = 149$) Palestinians living

---

[1] We decided to use hatred instead of contempt (as in Tausch et al., 2011) because recent research (see Halperin, 2008, 2011) has shown evidence of a very strong link between appraisals of the inability to change and hatred.

throughout Israel. Such samples usually cannot be obtained from Israeli polling as they have a limited capacity to reach this population, so participants were recruited with the help of Palestinian recruiters in several key population centers.

Measures

We designed a closed-ended questionnaire incorporating measures of emotions (anger and hatred) and mode of collective action (normative and nonnormative).

Emotions. Participants were asked to rate the degree to which they were feeling certain emotions on a 1 (*strongly disagree*) to 6 (*strongly agree*) scale. Anger was measured with two items (α = .87), "I feel anger against the government in light of the Prawer plan," and "I feel rage about the outline of the Prawer plan and its implications." Hatred was measured with two items (α = .83): "I feel hatred towards the Jews in light of the Prawer" and "I feel hostility toward Jews in Israel in light of the Prawar plan." To demonstrate that anger and hatred are distinct emotions in the context of collective action, we conducted an exploratory factor analysis using an oblique rotation. As expected, this analysis yielded two components with eigenvalues greater than 1 that accounted for 87.97% of the variance. Loadings showed that the anger items loaded onto on the first component (>.94), and the hatred items loaded onto the second factor (>.92).

Collective Action. We assessed participants' willingness to take part in certain activities aimed at preventing the implementation of the Prawar Plan (adapted from Tausch et al., 2011; van Zomeren et al., 2004). Five actions were intended to tap normative collective action ("Discussing the Prawar plan on social networks"; "Signing petitions"; "Participating in demonstrations"; "Organizing demonstrations"; and "Participating in strikes" α = .89) and four actions were intended to tap nonnormative collective action ("Blocking roads"; "Clashing with police"; "Throwing rocks or bottles"; and "Attacking politicians or police"; α = .92). Answers ranged from 1 (*not at all willing to partake in activity*) to 6 (*willing to partake in activity to a very large extent*). To confirm the distinction between normative and nonnormative actions, we conducted an exploratory factor analysis using an oblique rotation. As expected, this analysis yielded two components with eigenvalues greater than 1 that accounted for 75.56% of the variance. Loadings (see Appendix A) showed that the nonnormative actions loaded onto on the first component (>.79), and the three normative actions loaded onto the second factor (>.73).

Demographic Indicators. Participants also reported their gender, age, religion, and average income.

Results

Means, standard deviations, and correlations among all variables are presented in Table 1. Both anger and hatred were positively related to both normative and nonnormative collective action. However, when both emotions were entered into a regression predicting normative collective action, only anger (β = .49, $t = 6.93$, $p < .001$), and not hatred ($p = .36$), remained a significant predictor. On the other hand, when nonnormative collective action was the outcome variable, hatred was the most proximal predictor (β = .35, $t = 4.66$, $p < .001$), and anger ($p = .28$) no longer predicted nonnormative

Table 1. Bivariate Relationships Between Pilot Study Variables ($N = 207$)

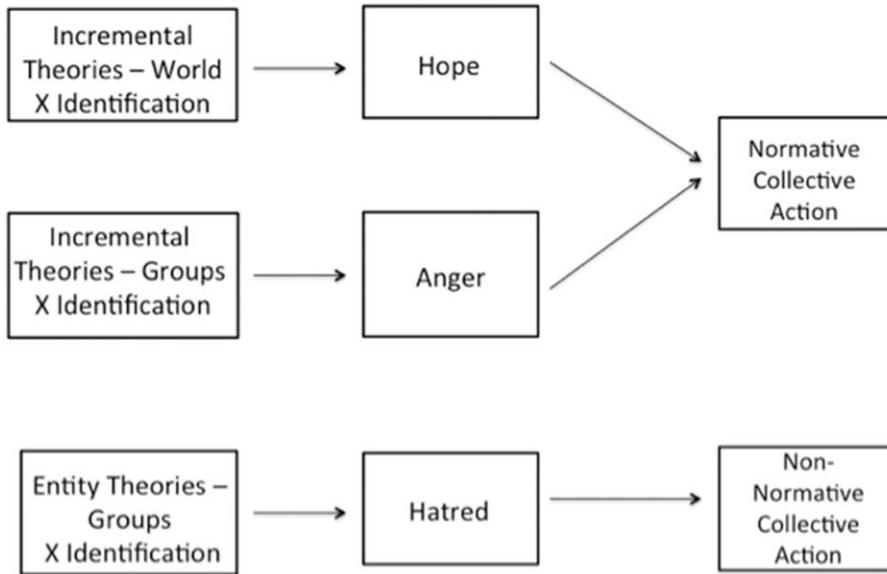|	M (SD)	1	2	3
1. Anger	4.95 (1.01)	–		
2. Hatred	3.85 (1.38)	.48**	–	
3. Normative Collective Action	4.66 (1.27)	.46**	.16*	–
4. Nonnormative Collective Action	2.90 (1.38)	.08	.32**	.47**

*$p < .05$; **$p < .01$.

Figure 1. Hypothesized relationships.

action. This supports our initial hypothesis that anger predicts normative collective action, while hatred predicts nonnormative action.

Main Study

Given that our initial hypotheses regarding hatred and anger were supported, we proceeded to test our full set of hypotheses. The main study was conducted during one of the largest social protests in Israel's history. This social protest, a massive-scale mobilization both online and in the streets, was driven by the middle class across lines of sector and profession and focused, among other things, on the rising cost of living and the retrenched state of welfare. The main message of the protest was to raise awareness inequalities between center and periphery, the rich and the middle strata, and therefore, the protesters' goal was to shift the political agenda and promote reform on these socioeconomic issues (there was also a deliberate effort to separate the movement from issues related to the Israeli-Palestinian conflict, which were seen as potentially divisive). A large amount of the population was actively involved in the movement, which was engaging in a wide range of activities. Thus, this context provided a unique opportunity to examine motivations for both normative and nonnormative actions in an ongoing real-world social movement.

We hypothesized three pathways to collective action stemming from implicit theories. First, hope will mediate the relationship between incremental beliefs about the world and normative collective action. Second, the relationship between incremental theories about groups and normative collective action will be mediated by anger. Third, hatred will mediate the relationship between entity theories about groups and nonnormative collective action. As we moved to considering the antecedents of emotions and action (rather than just emotions and action in the pilot study), we predicted that the relationships between implicit theories, emotions, and action would depend on levels of group identification.

The Moderating Impact of Group Identification

Given that group identification has been well established as the key psychological predictor of collective action (van Zomeren et al., 2008; van Zomeren, Leach, & Spears, 2012), we predicted that levels of identification with the relevant social group would moderate the hypothesized associations (see Figure 1 for summary of all hypotheses). More specifically, based on van Zomeren, Leach et al. (2012) recent conceptualization of group identity as the primary appraisal that determines a collective action context's relevance to the self, we predict that identification would mostly facilitate the effect of implicit theories by increasing the relevance of the collective action context and thus providing more motivation to engage in action. However, given the strong empirical link between group identification and anger (van Zomeren, 2013; van Zomeren et al., 2008), we contend that at high levels of identification this effect would make the impact of incremental theories less salient.

Method

Participants and Procedure

Participants were 151 Israeli citizens (39% female, $M_{age} = 28.67$, $SD = 12.67$) recruited between June and September of 2011. During the days of the protest, participants were approached on a train and asked by experimenters to complete a short questionnaire presented as a survey about "social issues." Participants had an average income of 5,472 NIS ($1,602) per month, ($SD = 5,468$), which was below the national average at the time (8,414 NIS/$2,447 per month). Politically, 48.2% defined themselves as rightist, 29.4% indicated they are centrists, and 22.4% stated they are leftists.

Measures

We designed a closed-ended questionnaire incorporating five measures: group identification, implicit theories about the world, implicit theories about groups, emotions (hope, anger, and hatred), and mode of collective action (normative and nonnormative).

Group Identification. Participants completed a three-item scale measuring their level of identification with the middle class in Israel,[2] adapted from the scale used by van Zomeren, Postmes, et al. (2012). Answers ranged from 1 (*strongly disagree*) to 6 (*strongly agree*). A sample item was "Belonging to the middle class in Israel is a major part of my identity" ($\alpha = .78$).

Implicit Theories about the World (ITW). We assessed implicit theories about the world using a four-item scale (see Appendix B), which was a modified version of Dweck, Chiu, and Hong's (1995) scale. A sample item was "Although you can change certain phenomena, it is unlikely that we can change the basic social and economic structure of the world" ($\alpha = .80$).

Implicit Theories about Groups (ITG). Participants then completed a four-item scale measuring implicit beliefs about groups (see Appendix B), adapted from the scale used by Rydell, Hugenberg, Ray, and Mackie (2007) and Halperin, Russell, Trzesniewski, et al. (2011). For example, "As hard as it is to admit, it is impossible to change the basic traits that characterize different groups and sectors" ($\alpha = .79$). For both scales, answers ranged from 1 (*strongly disagree*) to 6 (*strongly agree*), and the final items of both scales were reverse scored so that higher scores indicated more fixed (entity) beliefs.

Emotions. Participants were asked to rate the degree to which they were feeling certain emotions on a 1 (*strongly disagree*) to 6 (*strongly agree*) scale. Hope was measured with two items, "I feel

---

[2] While the Israeli middle class is not as distinct of an ingroup as one based on ethnicity or nationality, in the context of this social movement, it was the primary organizing identity for the movement. In fact, the movement characterized itself as representing the average middle-class Israeli. Similarly, while the outgroup of "the government and the tycoons" is not explicitly defined by the ingroup itself, it was defined by the discourse of the social movement, not just the items on the questionnaires (YNet News, "Housing crisis protesters march on Knesset," July 2011; BBC News, "Israelis hold renewed mass protests over living costs," September 2011).

hope about the ability of the middle class to change their current situation," and "I feel optimism about the possibility of housing protest will bring real change to the situation." Anger was measured with the item, "I feel anger toward the government and the tycoons." Lastly, hatred was measured with the item, "I feel hatred toward the government and the business tycoons." Since this study was conducted during a train ride, it needed to be very brief so we used only single-item measures of anger and hatred; single-item measurement has been used in many studies and has been shown to be reliable way of differentiating discrete emotions (Cohen-Chen, Halperin, Porat, & Bar-Tal, 2014; Halperin, Porat, Tamir, & Gross, 2013; Roseman & Evdokas, 2004; Reisenzein & Hoffman, 1993; Siemer, Mauss, & Gross, 2007).

Collective Action. We assessed participants' willingness to take part in certain activities aimed at addressing the problems faced by the middle class in Israel (adapted from Tausch et al., 2011; van Zomeren et al., 2004). These options were based on the actions that were occurring during the social protest and thus differ slightly from the pilot study, which was conducted in another context. Three actions were intended to tap normative collective action ("Discussing socioeconomic issues on social networks"; "Signing petitions"; and "Participating in demonstrations"; α = .76), and four actions were intended to tap nonnormative collective action ("Disrupting the events of wealthy or public figures"; "Blocking roads"; "Clashing with police trying to clear the demonstration"; and "Throwing rocks or bottles"; α = .90). Answers ranged from 1 (*not at all willing to partake in activity*) to 6 (*willing to partake in activity to a very large extent*). To confirm the distinction between normative and nonnormative actions, we conducted an exploratory factor analysis using an oblique rotation. Similar to the pilot study, this analysis yielded two components with eigenvalues greater than 1 that accounted for 74.36% of the variance. Loadings (see Appendix A) showed that the nonnormative actions loaded onto on the first component (> .85), and the three normative actions loaded onto the second factor (>.77).

Demographic Indicators. Participants also reported their gender, age, political orientation, and average income.

Results

Analysis Strategy

We first conducted preliminary analyses including correlations and simple regressions between the study variables. We then tested each one of our three hypotheses regarding the relationships between implicit theories, emotions, and collective action. In these analyses, we first checked if identification moderated the effect of implicit theories on the relevant emotion. We then moved on to mediation or moderated mediation model (depending on the outcome of the moderation analysis), with implicit theories as the predictor, the emotion as the mediator, identification as the moderator, and collective action as the outcome. Since we hypothesized that both incremental theories about the world and groups as well as hope and anger would predict normative collective action, we included implicit theories about groups and anger as covariates in the analyses regarding implicit theories about the world and hope and vice versa. Lastly, we integrated these models using path analysis.

Preliminary Analyses

Means, standard deviations, and correlations among all variables are presented in Table 2. As predicted, entity beliefs about both the world and groups in general were negatively associated with normative collective action, but not with nonnormative collective action, indicating that the more people believe that groups can change, the more likely they are to engage in normative, but not nonnormative, action. Correlations among the independent variables (identification and implicit

Table 2. Bivariate Relationships Between Main Study Variables ($N = 151$)

	M (SD)	1	2	3	4	5	6	7
1. Implicit Theories: World	2.82 (1.03)	–						
2. Implicit Theories: Groups	3.11 (1.04)	.65**	–					
3. Identification	4.13 (1.16)	.04	.02	–				
4. Hope	4.05 (1.10)	–.28**	.13	.37**	–			
5. Anger	4.23 (1.43)	–.16	–.11	.39**	.42**	–		
6. Hatred	3.07 (1.27)	.08	.09	.38**	.29**	.66**	–	
7. Normative Collective Action	3.01 (1.27)	–.29**	–.23**	.32**	.38**	.49**	.35**	–
8. Nonnormative Collective Action	1.47 (1.00)	–.02	.00	.19**	.22*	.30**	.35**	.57**

*$p < .05$; **$p < .01$.

theories about the world and groups) were significant but did not reach the critical value for multicollinearity (i.e., $r = .70$; Bagozzi, Yi, & Phillips 1991).

We then conducted a multiple-regressions test to examine our assumption that implicit theories about the world would be more strongly linked to hope than implicit theories about groups. When implicit theories about the world and groups were entered simultaneously as predictors of hope, only implicit theories about the world significantly predicted hope ($\beta = -.30$, $t = 3.21$, $p = .002$). All three emotions (hope, anger, and hatred) were positively related to both normative and nonnormative collective action. However, when all three emotions were entered into a regression predicting normative collective action, only anger ($\beta = .38$, $t = 3.76$, $p < .001$) and hope ($\beta = .22$, $t = 2.76$, $p = .007$) remained significant predictors. On the other hand, when nonnormative collective action was the outcome variable, hatred was the most proximal predictor ($\beta = .24$, $t = 2.37$, $p = 0.02$), and anger ($p = .44$) and hope ($p = .19$) no longer predicted nonnormative action. This supported our hypothesis that anger and hope predict normative collective action, while hatred predicts nonnormative action.

Lastly, we checked for differences in the mediating and dependent variables (emotions and action), according to gender, SES (low, average, and high), and political orientation (leftist, centrist, and rightist). There were no differences except that men expressed higher support for nonnormative action ($M = 1.19$, $SD = 0.13$) than women ($M = .48$, $SD = 0.06$), $t(147) = 2.53$, $p = .01$.[3]

Incremental Theories About the World, Hope, and Normative Action

Based on our hypothesis that identification would interact with the effects of incremental theories about the world, we first looked to see if there was a significant interaction between incremental theories about the world and identification on hope using Hayes's (2013) PROCESS command with 5,000 iterations (model 1). There was a significant direct effect of incremental theories ($\beta = -.66$, $SE = .27$, $t = -2.44$, $p = .02$, 95% confidence interval (CI) = $[-1.19, -0.13]$), but not of identification ($\beta = .14$, $SE = 0.18$, $t = 0.79$, $p = .43$, CI = $[-0.21, 0.50]$). Furthermore, the two-way interaction was not significant, ($\beta = .08$, $SE = 0.06$, $t = 1.32$, $p = .19$, CI = $[-0.04, 0.20]$).

Since there was no effect or interaction with identification, we moved on to test our hypothesis that hope mediated the relationship between incremental theories about the world and normative collective action. We used Hayes' (2013) PROCESS bootstrapping command with 5,000 iterations (model 4) to examine our hypothesis. This analysis revealed that the relationship between incremental theories about the world and normative collective action ($\beta = -.43$, $SE = 0.10$, $t = -4.20$, $p < 0.001$) was weakened after hope was added to the model ($\beta = -.32$, $SE = 0.10$, $t = -3.08$, $p = .02$) and that

---

[3] We do not further explore this gender difference in this article, as it was not the focus of this study. However, it may have interesting implications regarding other nonemotional drivers of nonnormative action that may differ by gender.
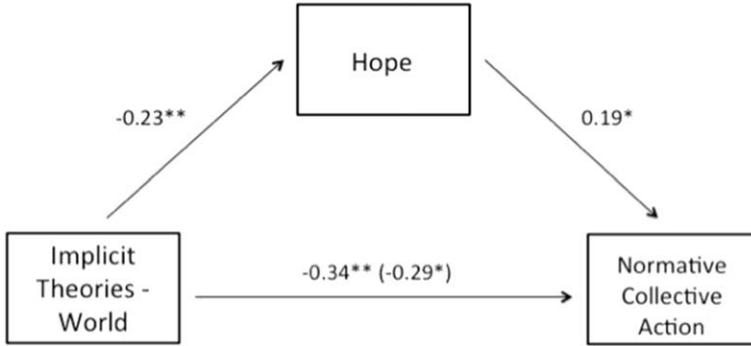
Figure 2. Indirect effect of implicit theories about the world on normative collective action through hope with implicit theories about groups and anger as covariates. *$p < .05$, **$p < .01$.
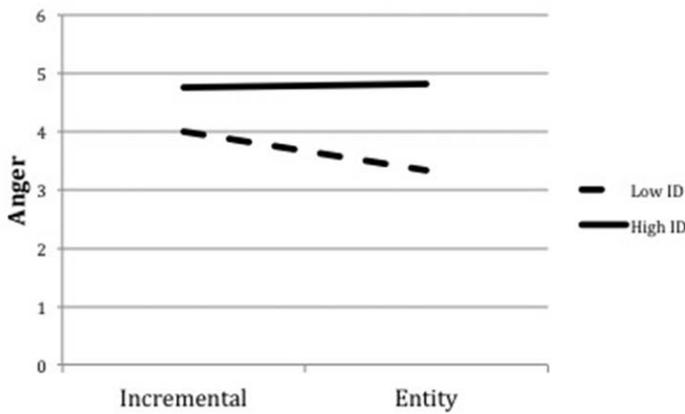

Figure 3. Interaction between implicit theories about groups and identification on anger.

the indirect effect through hope was significant (effect $= -.12$, $SE = 0.04$, CI: $[-0.22, -0.05]$). Since anger and implicit theories about groups were also a significant predictors of normative collective action, they were entered into the model as covariates, and the indirect effect through hope remained significant. Thus, hope mediated the relationship between incremental theories about the world and normative collective action, even when controlling for the effects of anger (see Figure 2).

Incremental Theories About Groups, Anger, and Normative Action

We then examined whether there was a significant interaction between incremental theories about groups and identification on anger using Hayes's (2013) PROCESS command with 5,000 iterations (model 1). Taking into account the interaction, there was a significant direct effect of incremental theories ($\beta = -.76$, $SE = 0.33$, $t = -2.32$, $p = .02$, CI $= [-1.41, -0.11]$), but not identification ($\beta = .02$, $SE = 0.26$, $t = 0.08$, $p = .94$, CI $= [-0.49, 0.53]$). Furthermore, the two-way interaction was marginally significant, ($\beta = .14$, $SE = 0.077$, $t = 1.91$, $p = .058$, CI $= [-0.005, 0.30]$). We further investigated this interaction (see Figure 3) by examining the effect of incremental theories about groups on anger at various levels of identification. This revealed that incremental theories were associated with anger, but only when level of identification was low (1 SD below the mean; $\beta = -.32$,
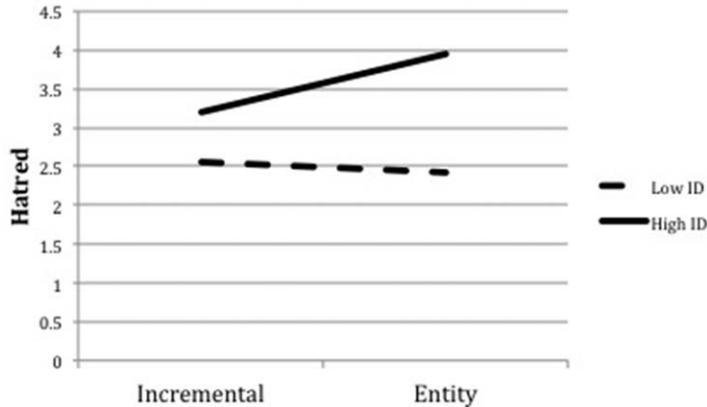
Figure 4. Interaction between implicit theories about groups and identification on hatred.

$SE = 0.13$, $t = -2.44$, $p = .02$, CI = $[-0.57, -0.06]$). However, at high levels of identification, there was no association between incremental theories and anger. This indicates that anger is already very high for those highly identified with the group, in line with current literature on collective action (van Zomeren et al., 2008), so there is no additional affect of incremental theories about groups. However, when group identification is lower, implicit theories facilitate anger.

In light of these results, we decided to proceed with a moderated mediation analysis. We used Hayes' (2013) PROCESS bootstrapping command with 5,000 iterations (model 7) to test the indirect effect of incremental theories about groups on normative collective action through anger, at various levels of identification. This test indicated the presence of moderated mediation (index of moderate mediation = .07, $SE = 0.04$, CI: [0.003, 0.15]. This analysis revealed that the indirect effect of incremental theories through anger was significant at low levels of identification (effect = $-.14$, $SE = 0.08$, CI: $[-0.31, -0.07]$), and the direct effect was not significant. Further, this indirect effect was non-significant at high levels of identification such that incremental theories about groups are associated with normative collective action through the indirect effect of anger only when identification levels are low. We also added hope and implicit theories about the world as covariates into the model since they were also significant predictors of normative collective action, and the moderated mediation remained significant.

Entity Theories About Groups, Hatred, and Nonnormative Action

To test our hypothesis that the relationship between entity theories and hatred would be moderated by group identification, we first tested whether there was an interaction between entity theories about groups and identification on hatred. We used Hayes' (2013) PROCESS command with 5,000 iterations (model 1). There was no significant direct effect of either entity theories or identification. However, the two-way interaction was significant, ($\beta = .18$, $SE = 0.08$, $t = 2.24$, $p = .03$, CI = [0.02, 0.35]), indicating that identification moderates the effect of entity theories on hatred (see Figure 4). We further investigated this interaction by examining the effect of entity theories on hatred at various levels of identification. This revealed that entity theories about groups were associated with hatred, but only at high level of identification (1 SD above the mean), ($\beta = .36$, $SE = 0.15$, $t = 2.38$, $p = .02$, CI = [0.06, 0.66]). However, at moderate or low levels of identification, there was no association between entity theories and hatred.
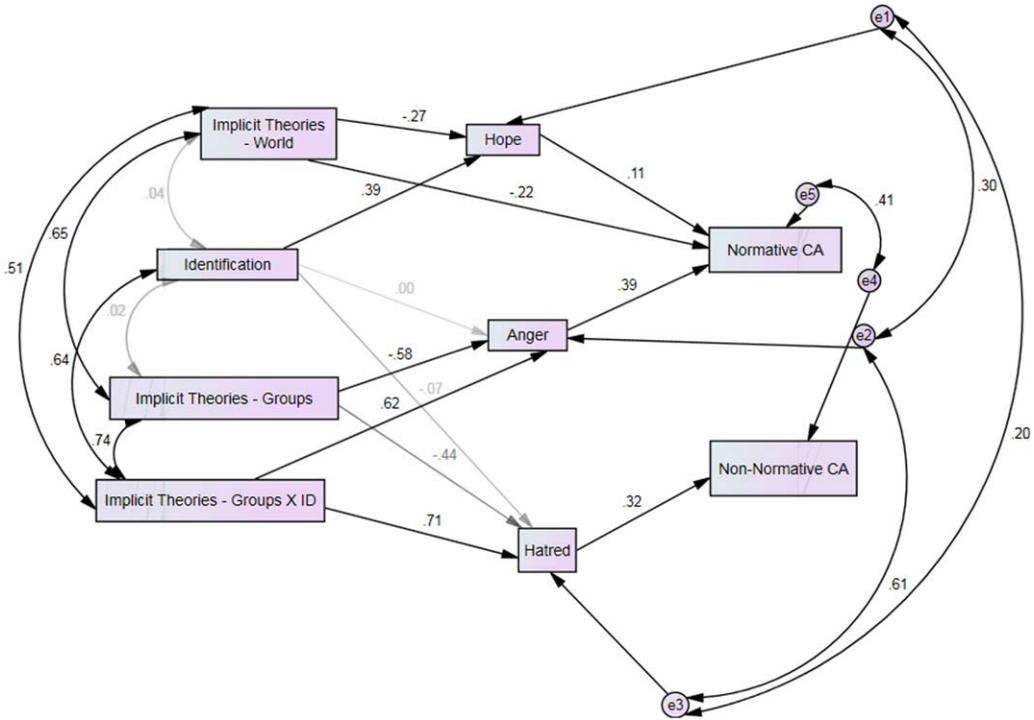
Figure 5. Path analysis.

Since the relationship between entity theories about groups and hatred was moderated by identification, we proceeded to test a full moderated-mediation model to determine if hatred mediates the relationship between entity theories about groups and nonnormative collective action at high levels of identification. We used Hayes' (2013) PROCESS bootstrapping command with 5,000 iterations (model 7), which did indicate the presence of moderated mediation (index of moderate mediation = .04, SE = 0.03, CI: [0.002, 0.10]. This showed that entity theories about groups were associated with nonnormative collective action through the indirect effect of hatred, but only when identification levels were high (effect = .08, SE = 0.04, CI: [0.02, 0.20]). This model indicates that entity theories about groups only predict hatred and nonnormative action when people are highly identified with the relevant ingroup.

Path Analysis

Lastly, we aimed to integrate these aforementioned three pathways into one model in order to demonstrate that these were distinct pathways that led either to normative or nonnormative action and to demonstrate that this model fit the data better than other possible models. We tested the model including all three paths using SPSS AMOS 6. In this model, we also included covariances between the predictor, mediator, and outcome variables. This a priori model fit the data well, χ^2 *(df* = 14, *N* = 151) = 17.37, *p* = .24, *CFI* = .996, *RMSEA* = .04. Figure 5 displays the standardized path coefficients. We also tested two alternative models, both of which did not fit the data as well. First, we tested a model where emotions lead to implicit theories, further leading to collective action. This model had poor fit, χ^2 *(df* = 13, *N* = 151) = 57.44, *p* < .001, *CFI* = .94, *RMSEA* = .15. Second, because our hypotheses suggested that certain implicit theories and emotions only predicted either normative or nonnormative action, we tested a model in which implicit theories and the various

emotions predicted both normative and nonnormative action. This model still fit the data well, χ^2 ($df = 11$, $N = 151$) = 12.79, $p = .31$, $CFI = .99$, $RMSEA = .03$. However, the paths from hope and anger to nonnormative action and from hatred to normative action were not significant, supporting our hypotheses. This analysis lends additional support for our prediction that implicit theories are a key psychological variable that determines people's emotional reactions and thus what type of collective action they are motivated to engage in.[4]

Discussion

The question of what motivates people to engage in collective action has been the subject of growing scientific research. However, this research has largely focused on normative collective action, paying less attention to nonnormative action. In this article, we expand on the existing research of Tausch et al. (2011) by further investigating the emotional path of the dual-pathway model. We argue that differing emotional reactions, which further lead to different forms of collective action, are predicted by different types of implicit theories. To investigate this argument, we employed a survey design during one of the largest social protests in Israeli history. Our analyses provide evidence that emotions driven by malleability beliefs (hope and anger) only predicted normative action, whereas fixed beliefs and hatred were linked to nonnormative action. Specifically, we found three distinct pathways involving different discrete emotions to either normative or nonnormative action. First, incremental theories about the world were related to hope, which were then related normative action. Second, incremental theories about groups were associated with anger, when group identification was low, which was then associated with normative action. And lastly, entity theories about groups predicted hatred, and thus nonnormative action, but only when group identification was high.

On a theoretical level, our work extends previous research on collective action by highlighting the role of implicit theories and discrete emotions in predicting different collective action tendencies. Currently, research on collective action has mainly focused on anger as an emotional motivator (van Zomeren, 2013; van Zomeren et al., 2008; van Zomeren et al., 2004) and contempt in the case of nonnormative action (Tausch et al., 2011). However, the current research indicates that other emotions, such as hope and hatred, can also be important predictors of action and predict different types of action. Thus, research on discrete emotions, which often focuses on the differing appraisals and action tendencies of emotions, may be a useful tool for understanding why different types of collective action occur. In addition, there has been very little research connecting implicit theories to the literature on collective action (for an exception, see Cohen-Chen et al., 2013). However, our work indicates that implicit theories have important implications for collective action, particularly in understanding support for normative versus nonnormative action. Therefore, future research should try to better combine these two fields of research.

Despite existing theory, which often sees identification with the group as a necessary prerequisite for collective action (van Zomeren, Leach, et al., 2012; van Zomeren et al., 2008), the current study found that incremental theories about the world predicted hope and normative action regardless of levels of identification. This could be explained by the fact that implicit theories about the world and hope are both constructs targeted at a situation in general (Cohen-Chen et al., in press; Dweck et al.,

---

[4] Because group efficacy is also an important predictor of collective action, we tested a model that included group efficacy; however, we left it out of the main results section for the sake of simplicity. The model remained the same, except group efficacy became an additional mediator between hope and normative collective action; this model also fit the data well, χ^2 ($df = 22$, $N = 151$) = 25.29, $p = .28$, CFI = .996, RMSEA = .03. This created a serial mediation, where hope and efficacy mediated the relationship between implicit theories about the world and normative action. We also tested this piece of the model in PROCESS (model 6), which indicated that implicit theories about the world had a significant indirect effect on normative action through hope and then efficacy (effect = $-.05$, $SE = 0.03$, CI: [-0.12, -0.01]).

1995; Staats & Stassen, 1985), rather than other groups, and thus are less affected by group identification. However, identification moderated the associations between implicit theories about groups and both anger and hatred, albeit in different ways.

First, incremental theories predicted anger when identification was low, but at high levels of group identification anger was uniformly high. This is in line with research that shows that high levels of group identification almost always lead to high levels of anger in the context of collective action (see van Zomeren, 2013, van Zomeren et al., 2008 for reviews), although this may not always be the case in other contexts. This seems to indicate that when group identification is elevated, its effect is strong regardless of malleability beliefs.

On the other hand, we observed a different relationship with regard to hatred and nonnormative action, where implicit theories only have an effect at high levels of identification. This is in line with prior models of collective action such as SIMCA (van Zomeren et al., 2008), which sees social identity as the psychological platform on which other antecedents are cultivated, and the coping approach (van Zomeren, Leach, et al., 2012), which sees identification as the primary appraisal which determines if the situation is self-relevant enough to initiate action. We feel that these perspectives are particularly relevant for nonnormative action, which inherently has greater costs and risks, thus requiring a higher self-relevance for individuals to be willing to accept these costs. Thus, hatred and nonnormative action only occur when high identification and entity theories co-occur: group identification defines a relevant outgroup and entity theories lead to hatred of this outgroup and thus nonnormative action.

In addition, this analysis indicates that hatred is a key emotional antecedent of nonnormative action. Neither anger nor hope predicted nonnormative action when controlling for hatred, despite the fact that anger and hatred were highly correlated. This correlation between anger and hatred is consistent with theory and prior research, which has shown that anger and hatred share some appraisals. Both are based on appraisals of unjust harm committed by a responsible actor; however, hatred carries the additional appraisals of evil character and stable nature of the target (Halperin, 2008; Sternberg, 2003). In addition, and as a result of its unique appraisals, hatred has significantly different emotional goals than anger. It is associated with the goal of harming the target, while anger's goal is correcting the targets behavior (Halperin, 2008). Thus, it makes sense that anger and hatred can co-occur given their overlap in appraisals but can be related to different action tendencies as a result of their differing emotional goals.

Implications, Limitations, and Directions for Future Research

At the practical level, our work provides useful guidance for interventions aimed at promoting positive social change. Recently the importance of informing efforts for social change with psychological research has received growing attention (see Saguy, Tausch, Dovidio, & Pratto, 2009; Wright & Baray, 2012). Specifically, our findings suggest incremental theories as a way to promote normative action and peaceful social change and decrease violent collective action. However, the current study was only correlational, and thus we cannot make causal claims about the effect of implicit theories on collective action. Future research should take existing manipulations of implicit theories (see Cohen-Chen et al., 2013; Halperin, Russell, Trzesniewski, et al., 2011) and determine whether inducing an incremental theory can increase hope and anger and thus support for normative action. In addition, inducing incremental theories has been shown to reduce hatred (Halperin, Russell, Trzesniewski, et al., 2011), which may also reduce support for radical and nonnormative action.

The local and contextual nature of the findings is an inevitable limitation of the study. It is important that future studies examine these relationships in different contexts. For example, these processes may work differently in contexts of intractable conflict, which by their very nature are perceived as difficult to change, or in actions taken by the high-power group on behalf of a disadvantaged group

(see van Zomeren et al., 2013), where those participating in action are also members of the group at which the action is aimed.

Another limitation of the current study is that it primarily focuses on emotions, although efficacy is recognized as another relevant factor in driving both normative (van Zomeren et al., 2004; van Zomeren et al., 2008; van Zomeren, Leach, et al., 2012) and nonnormative action (Tausch et al., 2011). As our research was a follow-up to Cohen-Chen et al. (2013) which linked incremental beliefs, efficacy, and normative action, we chose to focus on the emotional antecedents of collective action by showing that different types of implicit theories lead to different emotions and thus different actions. However, some of our secondary analyses (see footnote 3) do begin to make connections between these two kinds of antecedents of collective action (emotions and efficacy). Nevertheless, further research is needed to further integrate these two approaches. This is of particular theoretical importance regarding nonnormative action. Tausch et al. (2011) found an inconsistent relationship between efficacy and nonnormative action—efficacy was sometimes unrelated and sometime negatively related to nonnormative action. This could indicate efficacy concerns have less impact on nonnormative action. However, taken together, the findings of Tausch et al. (2011) and our findings that nonnormative action is driven by different emotions with significantly different emotional goals could also indicate that nonnormative action is still driven by efficacy beliefs; however, the goals of those efficacy beliefs are different from those that drive normative action. Further integrative research into efficacy, emotions, and nonnormative action could help elucidate these questions.

Lastly, future research should also examine the role of implicit theories in a longitudinal context. It may be that members of social movements begin with incremental theories and thus engage in normative action, but when their movements are unsuccessful at changing the situation, they develop entity theories and thus engage in radical action. A longitudinal study of implicit theories in a collective action context could help shed light on how social movements that begin as peaceful are later radicalized.

This study builds upon budding research into an important gap in the literature on collective action, namely understanding the difference between the psychological roots of normative and nonnormative action by adding the new element of implicit theories. The current research shows that differing implicit theories about the world and groups can lead to different emotional reactions, which then predict either normative or nonnormative action. The study offers evidence that without interventions to change people's malleability beliefs about groups and the world, emotional reactions will continue to take their political toll. In other words, a belief in the impossibility or difficulty of change will perpetuate hatred appraisals and political aggression. Thus it also indicates the possible potential of interventions promoting malleability beliefs to promote peaceful social change, while discouraging radical and violent actions.

ACKNOWLEDGMENTS

REFERENCES

Averill, J. R. (1982). *Anger and aggression: An essay on emotion.* New York, NY: Springer-Verlag.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*, 421–458.

Barlow, F. K., Sibley, C. G., & Hornsey, M. J. (2012). Rejection as a call to arms: Inter-racial hostility and support for political action as outcomes of race-based rejection in majority and minority groups. *British Journal of Social Psychology*, *51*, 167–177.

Becker, J. C., Tausch, N., Spears, R., & Christ, O. (2011). Committed dis(s)idents: Participation in radical collective action fosters disidentification with the broader in-group but enhances political identification. *Personality and Social Psychology Bulletin*, *37*, 1104–1116.

Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*, *135*, 183–204. doi:10.1037/a0013965

Christensen, P. N., Rothgerber, H., Wood, W., & Matz, D. C. (2004). Social norms and identity relevance: A motivational approach to normative behavior. *Personality and Social Psychology Bulletin*, *30*(10), 1295–1309.

Cohen-Chen, S., Crisp, R. J., & Halperin, E. (2015). Belief in a changing world induces hope and promotes peace in intractable conflicts. *Personality and Social Psychology Bulletin*, *41*(4), 498–512.

Cohen-Chen, S., Halperin, E., Crisp, R. J., & Gross, J. J. (2013). Hope in the Middle East: Malleability beliefs, hope, and the willingness to compromise for peace. *Social Psychological and Personality Science*, *5*, 67–75. doi:10.1177/1948550613484499

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. (2013). Beliefs about the malleability of immoral groups facilitate collective action. *Social Psychological and Personality Science*, *5*, 203–201. doi:10.1177/1948550613491292

Cohen-Chen, S., van Zomeren, M., & Halperin, E. (in press). Hope(lessness) and collective (in)action in intractable inter-group conflict. In Eran Halperin and Karen Sharvit (Eds.), *Understanding the social psychology of intractable conflicts: The Israeli-Palestinian case and beyond: A tribute to the legacy of Daniel Bar-Tal*. New York, NY: Springer.

Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality and development*. Philadelphia, PA: Taylor and Francis/Psychology Press.

Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgment and reactions: A world from two perspectives. *Psychological Inquiry*, *6*, 267–285.

Fischer, A., & Roseman, I. J. (2007). Beat them or ban them: The characteristics and social functions of anger and contempt. *Journal of Personality and Social Psychology*, *93*, 103–115.

Frijda, N. H. (1993). The place of appraisal in emotion. *Cognition and Emotion*, *7*, 357–387.

Greenaway, K. H., Cichocka, A., Veelen, R., Likki, T., & Branscombe, N. R. (2014). Feeling hopeful inspires support for social change. *Political Psychology*. doi:10.1111/pops.12225

Halperin, E. (2008), Group-based Hatred in Intractable Conflict in Israel. *Journal of Conflict Resolution*, *52*, 713–736.

Halperin, E. (2011), Emotional barriers to peace: Emotions and public opinion of Jewish Israelis about the peace process in the Middle East. Peace and Conflict: *Journal of Peace Psychology*, *17*, 22–45.

Halperin, E., Crisp, R., Husnu, S., Dweck, C., & Gross, J. (2013). Promoting intergroup contact by changing Beliefs: Group malleability, intergroup anxiety and contact motivation. *Emotion*, *12*, 1192–1195.

Halperin, E., Porat, R., Tamir, M., & Gross, J. J. (2013). Can emotion regulation change political attitudes in intractable conflicts? From the laboratory to the field. *Psychological Science*, *24*, 106–111.3

Halperin, E., Russell, A. G., Dweck, C. S., & Gross, J. J. (2011). Anger, hatred, and the quest for peace: Anger can be constructive in the absence of hatred. *Journal of Conflict Resolution*, *55*, 274–291.

Halperin, E., Russell, G. A., Trzesniewski, H. K., Gross, J. J., & Dweck, S. C. (2011). Promoting the peace process by changing beliefs about group malleability. *Science*, *333*, 1767–1969.

Hayes, A. F. (2013). *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

Hayes, B. C., & McAllister, I. (2005). Public support for political violence and paramilitarism in Northern Ireland and the Republic of Ireland. *Terrorism and Political Violence*, *17*, 599–617. doi:10.1080/095465590944569

Kelly, C., & Breinlinger, S. (1995). Identity and injustice: Exploring women's participation in collective action. *Journal of Community and Applied Social Psychology*, *5*, 41–57.

Klandermans, B. (1997). *The Social Psychology of Protest*. Oxford, UK: Basic Blackwell.

Lazarus, R. S. (1991). *Emotion and adaption*. New York, NY: Oxford Press.

Moskalenko, S., & McCauley, C. (2009). Measuring political mobilization: The distinction between activism and radicalism. *Terrorism and Political Violence*, *21*, 239–260. doi:10.1080/09546550902765508

Reifen-Tagar, M., Federico, C. M., & Halperin, E. (2011). The positive effect of negative emotions in protracted conflict: The case of anger. *Journal of Experimental Social Psychology*, *47*, 157–164. doi:10.1016/j.jesp.2010.09.011

Reisenzein, R., & Hofmann, T. (1993). Discriminating emotions from appraisal-relevant situational information: Baseline data for structural models of cognitive appraisals. *Cognition & Emotion*, *7*, 271–293.

Roseman, I., & Evdokas, A. (2004). Appraisals cause experienced emotions: Experimental evidence. *Cognition and Emotion*, *18*, 1–28.

Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In Phillip Shaver (Ed.), *Review of personality and social psychology* (Vol. 5, pp. 11–36). Beverly Hills, CA: Sage.

Roseman, I. J. (2001). A model of appraisal in the emotion system: Integrating theory, research, and applications. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal Processes in Emotion* (pp. 68–91). Oxford, UK: University Press.

Rydell, R. J., Hugenberg, K., Ray, D., & Mackie, D. M. (2007). Implicit theories about groups and stereotyping: The role of group entitativity. *Personality and Social Psychology Bulletin*, *33*, 549–558.

Sabucedo, J. M., & Arce, C. (1991). Types of political participation: A multi-dimensional analysis. *European Journal of Political Research*, *20*, 93–102. doi:10.1111/j.1475-6765.1991.tb00257.x

Saguy, T., Tausch, N., Dovidio, J. F., & Pratto, F. (2009). The irony of harmony: Intergroup contact can produce false expectations for equality. *Psychological Science*, *20*, 114–12.

Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. New York, NY: Oxford University Press.

Siemer, M., Mauss, I., & Gross, J. J. (2007). Same situation—different emotions: How appraisals shape our emotions. *Emotion*, *7*, 592–600.

Simon, B., & Klandermans, B. (2001). Politicized social identity. *American Psychologist*, *56*, 319–331.

Staats, S. R., & Stassen, M. A. (1985). Hope: An affective cognition. *Social Indicators Research*, *17*, 235–242. doi:10.1007/BF00319312

van Stekelenburg, J., Klandermans, B., & van Dijk, W. W. (2009). Context matters: Explaining how and why mobilizing context influences motivational dynamics. *Journal of Social Issues*, *65*, 815–838.

Sternberg, R. J. (2003). A duplex theory of hate: Development and application to terrorism, massacres, and genocide. *Review of General Psychology*, *7*, 299–328.

Stotland, E. (1969). *The psychology of hope*. San Francisco, CA: Jossey-Bass.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.

Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and non-normative collective action. *Journal of Personality and Social Psychology*, *101*, 129–148.

Wright, S. C., & Baray, G. (2012). Models of social change in social psychology: collective action or prejudice reduction? Conflict or harmony? In J. Dixon & M. Levine (Eds.), *Beyond prejudice: Extending the social psychology of conflict inequality and social change* (pp. 225–237). Cambridge, UK: Cambridge University Press.

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.

van Zomeren, M. (2013). Four core social-psychological motivations to undertake collective action. *Social and Personality Psychology Compass*, *7*, 378–388.

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.

van Zomeren, M., Postmes, T., & Spears, R. (2012). On conviction's collective consequences: Integrating moral conviction with the social identity model of collective action. *British Journal of Social Psychology*, *51*, 52–71.

van Zomeren, M., Postmes, T., Spears, R., & Bettache, K. (2011). Can moral convictions motivate the advantaged to challenge social inequality? Extending the social identity model of collective action. *Group Processes and Intergroup Relations*, *14*, 735–754.

van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*, 649–664. doi:10.1037/0022-3514.87.5.649

Appendix A

Factor Loadings for Main Study Collective Action Items

	Normative Factor	Nonnormative Factor
1. Discussing the Prawar plan on Social Networks	**.85**	.11
2. Signing Petitions	**.83**	.07
3. Participating in Demonstrations	**.88**	.44
4. Organizing Demonstrations	**.79**	.56
5. Participating in Strikes	**.81**	.25
6. Blocking Roads	.47	**.73**
7. Clashing with Police Trying to Clear Demonstration	.48	**.86**
8. Throwing Rocks or Bottles	.15	**.92**
9. Attacking Politicians or Police	.12	**.90**

Factor Loadings for Main Study Collective Action Items

	Normative Factor	Nonnormative Factor
1. Discussion Of Socioeconomic Issues in Social Networks	**.77**	.43
2. Signing Petitions	**.83**	.25
3. Participating in Demonstrations	**.85**	.40
4. Disrupting the Events of Public or Wealthy Figures	.48	**.87**
5. Blocking Roads	.51	**.90**
6. Clashing with Police Trying to Clear Demonstration	.35	**.91**
7. Throwing Rocks or Bottles	.24	**.85**

Note: Factor loadings of each item are bolded to reflect the factor onto which the item loaded.

Appendix B

Implicit Theories About the World

1. Although you can change certain phenomena, it is unlikely that you can change the basic social and economic order of the world.
2. In our world there is a basic order, and there is not really anything I can do to change it.
3. The political structure, as well as existing balance of power within it, is maintained over many years by the establishment and so it is impossible to change it.
4. Social organizations can create real change in institutions and political structures

Implicit Theories About Groups

1. Hard as it is to admit, it is impossible to change the basic character traits that characterize different groups and sectors
2. Groups can sometimes change their behavior on the outside, but they cannot change who they really are.
3. Groups immoral characteristics do not change in the world, because these characteristics are deeply embedded in them
4. Social and political processes can make a difference in moral values of peoples and groups. (reverse scored)