



Social change as an important goal or likely outcome: How regulatory focus affects commitment to collective action

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The results of three experiments showed that regulatory focus influences the way in which the importance and likelihood of social change affect individuals' commitment to collective action. In Studies 1 ($N = 82$) and 2 ($N = 153$), the strength of participants' chronic regulatory focus was measured. In Study 3 ($N = 52$), promotion or prevention focus was experimentally induced. The results showed that for individuals under promotion focus, commitment to collective action depended on the perceived likelihood that through this action important social change would be achieved. Individuals under prevention focus were willing to commit to collective action when they attached high importance to its goal, regardless of the extent to which they believed that attainment of this goal was likely. Implications of these results for work on regulatory focus and collective action are discussed.

Sometimes members of disadvantaged groups are willing to face overwhelming odds to improve their group's position. An example is the recent uprising in Burma. Although the Burmese regime – a military junta – violently quashes any threat to its power and protest has very little chance of success, still in 2007 hundreds of thousands of Burmese citizens took to the streets to protest against their government. At other times, people's motivation to engage in collective action appears more instrumental; they participate only when they believe that collective action will help achieve social change. For example, in the context of union activism, the perceived likelihood that collective action will achieve its desired goal has been found to be a strong predictor of participation in collective action (Flood, 1993; Klandermans, 1984a, 1984b, 1986). Thus, previous work has established that some instances of collective action are driven by the perceived likelihood that they will succeed, whereas others are driven by the importance attached to their goal (Klandermans & Oegema, 1987; Van Stekelenburg, Klandermans, & Van Dijk, 2009). Building on these insights, the purpose of the present research is to examine *when* and *why* collective action is driven by instrumental motives or by the

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perceived importance of its goal. More specifically, we aim to address this question using insights from regulatory focus theory (Higgins, 1997; Shah & Higgins, 1997). We will show that for individuals under promotion focus, the motivation to engage in collective action is driven by the likelihood that through this action important social change will be achieved. By contrast, we will show that for individuals under prevention focus the motivation to engage in collective action is unaffected by the likelihood of social change, provided its goal is deemed sufficiently important.

In the next section, we will discuss existing work on the motivation to engage in collective action. We then introduce regulatory focus theory (Higgins, 1997) and explain how insights relevant to self-regulation can advance our understanding of individual motivation to engage in collective action.

Individual motivation to engage in collective action

Collective action - co-operative effort towards group goals - can be a powerful instrument for low-status groups to increase their social status (Tajfel & Turner, 1979). Previous research has demonstrated that perceiving one's group as being disadvantaged increases an individual's motivation to engage in collective action aimed at improving the group's relative position (Bettencourt, Dorr, Charlton, & Hume, 2001; Smith & Ortiz, 2002). Thus, the disadvantaged position of a social group is likely to increase the importance group members attach to social change and to elicit their motivation to engage in collective action.

Nevertheless, even when they recognize the disadvantaged position of their group, members of low-status groups do not always perceive collective action as an attractive option (Lalonde & Silverman, 1994; Wright & Taylor, 1998). One reason for this is that they may not believe that collective action will result in the desired social change. Research exploring this possibility has found that the perceived likelihood that collective action will result in social change generally increases the motivation to engage in collective action (Van Zomeren, Postmes, & Spears, 2008). However, there are also a number of studies that have failed to find support for this relationship (e.g., Fox-Cardamone, Hinkle, & Hogue, 2000; Fox & Schofield, 1989; Schofield & Pavelchak, 1989). Likewise, research among real-world collective activists has not consistently shown that the perceived likelihood of social change is a strong predictor of enduring commitment to collective action (Kelly, 1993; Simon *et al.*, 1998; Stürmer & Simon, 2004, 2005; Stürmer, Simon, Loewy, & Jorger, 2003). Thus, individuals' commitment to collective action is not always determined by how likely they perceive that through this action important social change will be achieved. This raises the question as to when individuals commit to collective action, and why sometimes they may be willing to do so regardless of the perceived likelihood that this action will lead to social change. We propose that the principles outlined by regulatory focus theory (Higgins, 1997) can help answer this question.

A self-regulation approach to engagement in collective action

Regulatory focus theory distinguishes between two motivational systems that regulate goal-directed behaviour: promotion focus and prevention focus. Activation of the promotion and prevention foci differentially affects the way in which goals are construed (i.e., as ideals or as oughts, respectively), the preferred strategies for pursuing these goals (i.e., through approach or avoidance), and the emotional reactions associated

with success and failure (cheerfulness and dejection *vs.* quiescence and agitation). The strength of promotion and prevention focus varies both chronically across individuals and momentarily across situations (Higgins, Friedman, Harlow, Idson, & Ayduk, 2001). Adoption of a promotion focus indicates a concern with gain and the achievement of growth and accomplishment goals. Individuals under promotion focus construe goals as ideals, or as maximal goals that they would ideally like to accomplish, and initiate goal pursuit when they perceive opportunities for goal advancement (Shah & Higgins, 1997). By contrast, a prevention focus indicates a concern with safety and the fulfilment of duties and responsibilities. Individuals under prevention focus construe goals as 'oughts', or as minimal goals that should be accomplished, and initiate goal pursuit out of a sense of necessity (Shah & Higgins, 1997).

We connect to current insights on promotion and prevention orientation to predict when, and for which individuals, the importance and/or the likelihood of social change motivate engagement in collective action aimed at achieving this change. Individuals under promotion focus should be inclined to construe social change as a maximal aspiration they would ideally like to accomplish, which affords them flexibility in waiting for opportunities for goal advancement. As a result, individuals under promotion focus initiate goal pursuit based on opportunity for goal advancement rather than out of necessity (Shah & Higgins, 1997). Thus, when social change increases in perceived importance, individuals under promotion focus should therefore become more attentive to opportunities for attaining this goal. Provided they believe that social change is important, individuals under promotion focus should be motivated to engage in collective action by the perception that achievement of its goal is likely (Hypothesis 1).

By contrast, under prevention orientation, individuals should construe social change as a minimally acceptable outcome. When such a minimal goal increases in importance, it becomes a necessity that must be pursued regardless of the expected outcome (Shah & Higgins, 1997). Thus, individuals under prevention orientation should construe the achievement of highly important social change as a necessity, which should cause them to pursue this change even if the likelihood that it will be achieved is low. When the perceived importance of social change is relatively low (i.e., when social change is not seen as a necessity), prevention-oriented individuals should be more sensitive to the likelihood of social change in their decision to engage in collective action. In this case, investing in unsuccessful collective action should represent a loss of time and effort, whereas engagement in successful collective action should be considered a safe investment. Thus, we predict that individuals under prevention focus should be motivated to pursue social change when they see it as highly important. This should be the case even if the perceived likelihood that this goal will be achieved is low. When social change is deemed relatively unimportant, individuals under prevention focus should only be motivated to engage in collective action to the extent that they believe that the likelihood of social change is high (Hypothesis 2).

Overview of the present research

To test these predictions, we conducted three studies. We used a paradigm in which women were made aware of the unfair treatment of their gender group in work situations. They were told that because of gender discrimination, women earn less and receive fewer opportunities for job advancement than men. To give participants the possibility to take a stance against this discrimination, a collective action group was then introduced (in

actuality this group was fictitious). The extent to which the participants were actually willing to commit themselves to collective action was measured through the support they gave to the collective action group on its (bogus) website.

Across the three studies, we used different ways to examine the prediction that regulatory focus influences the way in which the importance and likelihood of social change affect commitment to collective action. In Study 1, we assessed chronic individual differences in regulatory focus and naturally occurring variations in the perceived importance of the collective action group's goal, while manipulating the likelihood that the goal would be reached. In Study 2, we assessed chronic individual differences in regulatory focus in a different way and experimentally manipulated both the importance of the group's goal and the likelihood that this goal would be achieved. Finally in Study 3, we manipulated regulatory focus, and assessed naturally occurring differences in the importance of the group's goal and perceived likelihood that the goal would be achieved. Thus, across the three studies all independent variables were manipulated at least once, allowing us to rule out alternative causal interpretations of the results. In all three studies, participants' commitment to collective action served as the dependent variable.

STUDY 1

Method

Participants and design

Eighty-two female undergraduate students from Leiden University ($M_{\text{age}} = 19.65$, $SD = 2.33$) participated in exchange for €3 or course credit. They were randomly assigned to the conditions of a one-factor (likelihood that the collective action group would reach its goal: high *vs.* low) between-participants design. Participants' chronic regulatory focus and the importance they placed on the goal of the collective action group were measured and treated as independent variables. Commitment to collective action formed the dependent variable.

Procedure

Participants were told that they would be taking part in two unrelated studies: a short survey and an experiment. The survey consisted of the pre-measure of regulatory focus. Participants' chronic promotion and prevention focus were assessed with the Regulatory Focus Proverb Questionnaire (Van Stekelenburg, 2006). Six items assessed promotion strength (e.g., 'Nothing ventured, nothing gained', $\alpha = .75$) and six items prevention strength (e.g., 'Cobbler, stick to thy last', $\alpha = .54$). We created a regulatory focus dominance measure by subtracting the standardized scores on the prevention scale from the standardized scores on the promotion scale (Keller & Bless, 2006; Sassenberg, Jonas, Shah, & Brazy, 2007). High values on this measure indicated a dominant promotion focus; low values a dominant prevention focus.

Participants were then informed that the first study was completed and that the second study would now commence. Subsequently, participants read a research report supposedly written by two well-known Dutch research organizations. In reality, this report was constructed to make participants aware of the disadvantaged position of their group (women) in work situations. Participants read that women earn approximately 7%

less than men for the same work, and receive fewer opportunities for job advancement. Finally, participants read a pamphlet in which a collective action group presented a plan to counter the discrimination women face in work situations (in actuality the group was fictitious). In the pamphlet, the collective action group asked the participants to indicate their support on its website.

To manipulate the likelihood that the collective action group would reach its goal, we varied the contents of the research report and the collective action group's pamphlet. In the high-likelihood condition, participants read that initiatives against gender discrimination in work situations tend to have considerable effects and that the collective action group expected to achieve its goals. In the low-likelihood condition, participants read that initiatives against gender discrimination in work situations tend to be low in success and that the collective action group expected the achievement of its goals to be quite difficult.

Measures

All variables were measured on nine-point Likert scales ranging from 1 (*completely disagree*) to 9 (*completely agree*), unless otherwise indicated.

Manipulation check

The perceived likelihood that the collective action group would be successful was measured with a single item ('I think the collective action group will be successful in its struggle against gender discrimination in work situations').

The importance participants attached to the goal of the collective action group was measured with four items (e.g., 'I think it's very important to counter gender discrimination in work situations', $M = 7.43$, $SD = 0.92$, $\alpha = .85$).

Commitment to collective action

Participants were then connected to the (fictitious) website of the collective action group. There they could choose to support the collective action group by (1) signing a petition, (2) becoming a member of the group, and/or (3) signing up for participation in a demonstration by the group against gender discrimination. These items were constructed to measure collective action at increasing levels of commitment, thus forming a cumulative Guttman scale (Guttman, 1947). Analyses confirmed the Guttman nature of the scale.¹ Therefore, we summed the number of ways in which each participant chose to support the collective action group to form the measure of commitment to collective action (Green, 1956; Kelloway & Barling, 1993).

¹ As in earlier work that used a Guttman scale to assess commitment to collective action (Kelloway & Barling, 1993), we assessed the quality of the Guttman scale by calculating its coefficients of reproducibility (Guttman, 1947), and scalability H (Mokken & Lewis, 1982; Van Schuur, 2003), and by fitting to it the structure assumed by the Guttman scale model: the Simplex (Guttman, 1954). Coefficients of reproducibility exceeding .90, coefficients of scalability exceeding .40, and good fit to the Simplex model indicate high quality Guttman scales. The measure showed a high coefficient of reproducibility (.99), a high degree of scalability ($H = .69$), and a good fit to the Simplex model ($\chi^2(1, N = 82) = .33$, $p = .57$, $NNFI = 1$, $CFI = 1$, $RMSEA = 0$).

Results

Manipulation check

As intended, an analysis of variance (ANOVA) on the manipulation check showed that participants in the high-likelihood condition expected the collective action group to be significantly more successful ($M = 6.93, SD = 1.03$) than participants in the low-likelihood condition ($M = 6.34, SD = 0.99, F(1, 87) = 6.85, p = .01, \eta_p^2 = .08$).

Commitment to collective action

The data for the commitment to collective action measure were analysed with hierarchical multiple regression using the effect-coded likelihood manipulation, the standardized regulatory focus dominance and importance scales and their two- and three-way interactions as predictors. The three-way interaction between the likelihood manipulation and the regulatory focus dominance and importance scales was significant ($B = .26, SE = .08, F(1, 74) = 11.55, p = .001, \Delta R^2 = .12$). We used simple slope analysis to break down this three-way interaction (Aiken & West, 1991). The results revealed the predicted interaction between the importance of the collective action group’s goal and the likelihood that this goal would be achieved among individuals under promotion focus ($B = .34, SE = .10, F(1, 74) = 11.85, p < .001$, Figure 1a). As expected (Hypothesis 1), for individuals under promotion focus who placed high importance (+1 SD) on the goal of the collective action group, commitment to collective action was higher in the high-likelihood condition than in the low-likelihood condition ($B = .30, SE = .12$,

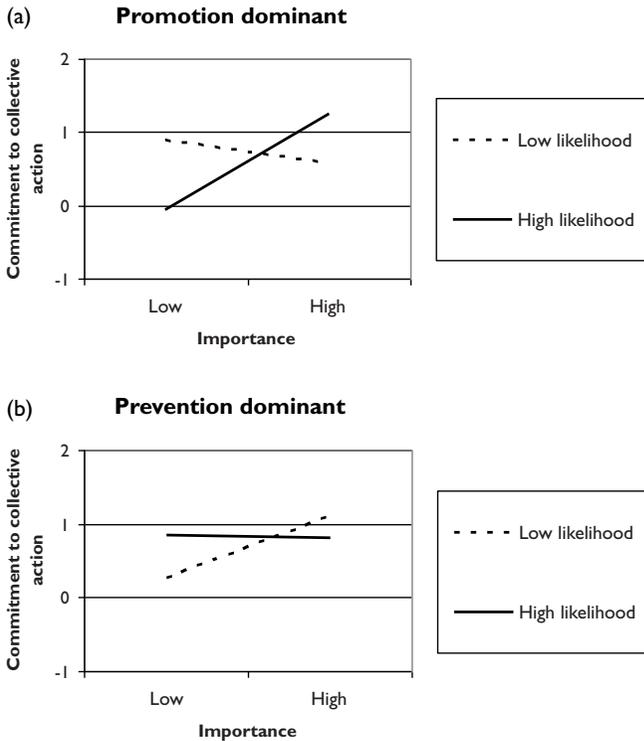


Figure 1. Commitment to collective action as a function of the importance of social change and the manipulation of the likelihood of social change for individuals with a dominant promotion versus prevention orientation (Study 1).

$F(1, 74) = 6.75, p = .01$). When they placed low importance ($-1 SD$) on the goal of the collective action group, commitment to collective action was actually lower in the high-likelihood condition than in the low-likelihood condition ($B = -.39, SE = .15, F(1, 74) = 6.80, p = .01$).

For individuals under prevention focus, the results revealed a different interaction between importance and likelihood ($B = -.18, SE = .10, F(1, 74) = 3.58, p = .06$, Figure 1b). As predicted (Hypothesis 2), when individuals under prevention focus placed high importance on the goal of the collective action group, there was no effect of the likelihood that the collective action group would be successful ($B = -.13, SE = .13, F(1, 74) = 0.99, p = .32$). Only individuals under prevention focus who placed low importance ($-1 SD$) on the goal displayed slightly more commitment to collective action in the high-likelihood condition than in the low-likelihood condition ($B = .24, SE = .14, F(1, 74) = 3.15, p = .08$).

Discussion

The results of this first study offer support for the prediction that regulatory focus influences how the importance and likelihood of social change affect individuals' motivation to engage in collective action. As expected, for individuals under a dominant promotion focus, the likelihood that collective action would be successful increased commitment to collective action, provided that its goal was seen as important. By contrast, individuals under a dominant prevention focus who perceived the goal of the collective action group as important were willing to support the group regardless of the likelihood that it would be successful. For these individuals, the likelihood that the collective action group would be successful only (slightly), increased commitment to collective action when relatively low importance was placed on its goal. In addition to these predicted effects, there was also an unanticipated observation. For individuals under a dominant promotion focus who placed relatively little importance on the collective action group's goal, commitment to collective action was actually lowered by the perceived likelihood that this goal might be achieved. We expected perceived likelihood to have less of an effect in this situation but not necessarily to lower commitment to collective action. We will assess the reliability of this unexpected finding in Studies 2 and 3.

Importantly, because two of the independent variables (regulatory focus and the importance of the collective action group's goal) were assessed as naturally occurring differences between participants, the usual objections to making causal inferences based on (partial) correlational data apply to this study. Therefore, in Study 2 we experimentally manipulated both the importance of the collective action group's goal and the likelihood that this goal would be achieved. In addition, we used a different measure of regulatory focus to obtain convergent support for our predictions.

STUDY 2

Method

Participants and design

One hundred and fifty-three female undergraduate students from Leiden University ($M_{age} = 20.39, SD = 2.29$) participated in exchange for €3.50 or course credit. They

were randomly assigned to the conditions of a 2 (importance of the collective action group's goal: high *vs.* low) \times 2 (likelihood that this goal would be achieved: high *vs.* low) between-participants factorial design. Participants' regulatory focus was measured as an independent variable prior to the experiment.

Procedure

We used the same procedure as in Study 1, with two differences. First, we used a different measure to assess regulatory focus. Second, we manipulated - rather than measured - the importance placed on the goal of the collective action group. We used the same manipulation of the likelihood that the collective action group would reach its goal as in Study 1. As in Study 1, participants were informed that they would be taking part in two unrelated studies: a short survey and an experiment.

The short survey consisted of the pre-measure of regulatory focus. Participants' chronic promotion and prevention focus were measured using eight items taken from the Lockwood scale (Lockwood, Jordan, & Kunda, 2002). Four items assessed promotion strength (e.g., 'I often think about the person I would ideally like to be in the future', $\alpha = .66$) and four items prevention strength (e.g., 'I frequently think about how I can prevent failures in my life', $\alpha = .61$). As in Study 1, we calculated a regulatory focus dominance measure by subtracting the standardized prevention scores from the standardized promotion scores.

Participants then read the research report about the unfair treatment of women in work situations. After this, we manipulated the importance placed on the collective action group's goal. Research on the behaviour-attitude link (cf., Festinger & Carlsmith, 1959; Janis & King, 1954; King and Janis, 1956) has shown that individuals - when presenting a persuasive argument - adapt their private opinions in the direction of the position they argue. We used this as the basis for the importance manipulation. Participants wrote a short paragraph in which they argued either in favour of (high-importance condition) or against (low-importance condition) the importance of striving for gender equality in work situations (the goal of the collective action group). Next, participants read the collective action group's pamphlet and completed the dependent measures.

Measures

All variables were measured on nine-point Likert scales ranging from 1 (*completely disagree*) to 9 (*completely agree*), unless otherwise indicated.

Manipulation checks

The perceived importance of the collective action group's goal was measured with a single item ('I think countering gender discrimination in work situations is not crucial' [reverse scored]). The perceived likelihood that the collective action group would reach its goal was measured in the same way as in Study 1.

Commitment to collective action

As in Study 1, participants were connected to the (fictitious) website of the collective action group. There they could choose to support the collective action group by

(1) signing a petition, (2) signing up for the action group's newsletter (item added in Study 2), (3) becoming a member of the action group, and/or (4) signing up for participation in a demonstration against gender discrimination (items ordered from low to high commitment). Analyses confirmed the Guttman nature of the scale.² We thus summed the number of ways in which each participant chose to support the collective action group to form the measure of commitment to collective action.

Results

Manipulation checks

As intended, an importance \times likelihood ANOVA on the manipulation check of importance showed that participants in the high-importance conditions reported placing more importance on the goal of the collective action group ($M = 8.01$, $SD = 1.17$) than participants in the low-importance conditions ($M = 7.51$, $SD = 1.45$, $F(1, 149) = 6.13$, $p = .01$, $\eta_p^2 = .04$). No other effects emerged (p 's $> .30$).

An importance \times likelihood ANOVA on the manipulation check of likelihood showed that participants in the low-likelihood conditions reported a somewhat lower perceived likelihood that the collective action group would reach its goal ($M = 5.96$, $SD = 1.46$) than did participants in the high-likelihood conditions ($M = 6.40$, $SD = 1.33$, $F(1, 149) = 3.80$, $p = .06$, $\eta_p^2 = .02$). No other effects emerged (p 's $> .66$).

Commitment to collective action

The results for the commitment to collective action measure were analysed in the same way as in Study 1. As expected, the three-way interaction between the regulatory focus dominance scale and the manipulations of importance and likelihood was significant ($B = .17$, $SE = .06$, $F(1, 145) = 8.54$, $p = .004$, $\Delta R^2 = .05$). Simple slope analysis (Aiken & West, 1991) revealed the predicted interaction (Hypothesis 1) between the importance and likelihood of social change among individuals under promotion focus ($B = .15$, $SE = .08$, $F(1, 145) = 3.50$, $p = .06$, $\Delta R^2 = .02$, Figure 2a). As expected, the likelihood that the collective action group would reach its goal increased commitment to collective action among individuals under promotion focus in the high-importance condition ($B = .28$, $SE = .14$, $F(1, 74) = 4.04$, $p = .05$) but not in the low-importance condition ($B = -.02$, $SE = .09$, $F(1, 71) < 1$, $p = .84$).

As in Study 1, we found a different interaction between importance and likelihood among individuals under prevention orientation ($B = -.18$, $SE = .07$, $F(1, 145) = 6.02$, $p = .02$, $\Delta R^2 = .04$, Figure 2b). As expected (Hypothesis 2), among individuals under prevention focus who placed high importance on the collective action group's goal, the likelihood that this goal could be achieved did not increase (and even slightly decreased) commitment to collective action ($B = -.21$, $SE = .11$, $F(1, 74) = 3.59$, $p = .06$). Among individuals under prevention focus who placed low importance on the collective action group's goal, the likelihood of social change did not reliably affect commitment to collective action ($B = .15$, $SE = .09$, $F(1, 71) = 2.60$, $p = .11$).

² The commitment to collective action scale showed good reproducibility (.99) and scalability ($H = .44$), and fitted well to the Simplex structure ($\chi^2(3, N = 153) = 3.58$, $p = .31$, $NNFI = .94$, $CFI = .97$, $RMSEA = .04$).

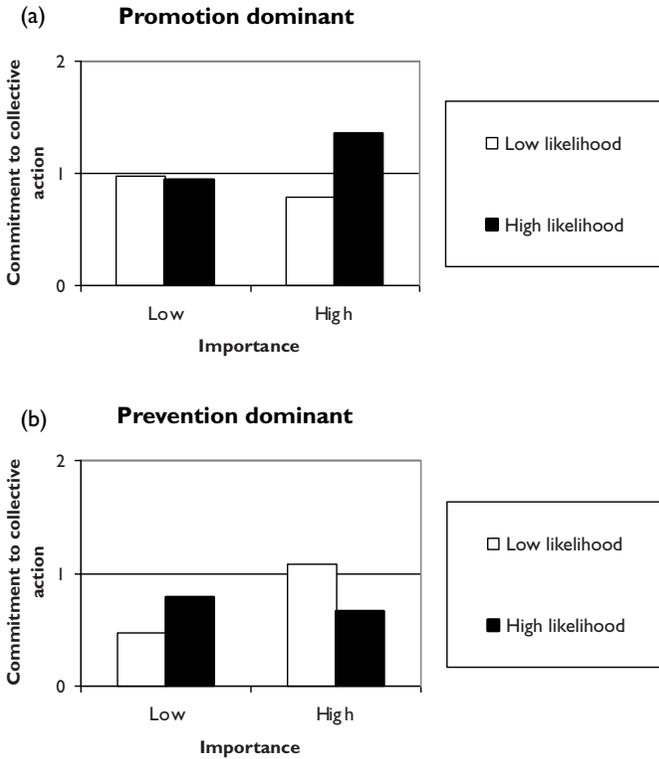


Figure 2. Commitment to collective action as a function of the manipulations of the importance and likelihood of social change for individuals with a dominant promotion versus prevention orientation (Study 2).

Discussion

The results of this study offer additional support for the prediction that individuals' regulatory focus influences the way in which the importance and likelihood of social change affect commitment to collective action. As predicted, individuals under promotion focus were motivated to engage in collective action by the perceived likelihood that it would be successful, provided they perceived its goal as important. Also as predicted, among individuals under prevention focus who placed high importance on the collective action group's goal, the likelihood of social change did not increase commitment to collective action. For both individuals under promotion and prevention focus, the likelihood of social change had no effect on commitment to collective action when low importance was attached to the goal of the collective action group. Thus, the unexpected negative effect of the likelihood that the collective action group would be successful that was found among individuals under promotion focus in Study 1 did not emerge in Study 2.

Study 2 extends the results of Study 1 by showing the causal role that the perceived importance of social change plays in individual commitment to collective action. Also, Study 2 demonstrates similar results as Study 1 using a different measure of regulatory focus, attesting to the robustness of these findings. However, we wished to demonstrate that inducing a promotion or prevention focus would be sufficient to produce the same results. Therefore, we conducted a third study in which regulatory focus was experimentally manipulated.

STUDY 3

Method

Participants and design

Fifty-two female undergraduate students from Leiden University ($M_{\text{age}} = 20.86$, $SD = 3.02$), participated in exchange for €3 or course credit. They were randomly assigned to the conditions of a one-factor (regulatory focus: promotion *vs.* prevention) between-participants design. The perceived importance of the collective action group's goal and the likelihood that this goal would be achieved were measured as independent variables.

Procedure

We used the same procedure as in Studies 1 and 2, with two exceptions. First, we manipulated – instead of measured – regulatory focus. Second, this time we measured – instead of manipulated – the importance and likelihood of social change.

We manipulated regulatory focus with an adapted version of the procedure suggested by Higgins, Roney, Crowe, & Hymes (1994). Prior to being presented with the other materials, participants wrote about what they would ideally like to (promotion condition) or felt they ought to (prevention condition) achieve in their working life. According to Higgins and colleagues (1994), the priming of ideals causes individuals to adopt a promotion focus, whereas the priming of oughts causes individuals to adopt a prevention focus.

Participants then read the same research report about the disadvantaged position of women in work situation as in Studies 1 and 2. The time they needed to report their (promotion- and prevention-related) emotional reactions to this information served as the check of the regulatory focus manipulation. According to Shah and Higgins (2001), individuals under promotion focus are faster at appraising how cheerful or dejected a stimulus makes them feel, whereas individuals under prevention focus are faster at appraising how quiescent or agitated a stimulus makes them feel. We thus measured participants' promotion-related (*dejection and cheerfulness*) and prevention-related (*agitation and quiescence*) emotions using six items and recorded the time they needed to indicate their answers to serve as the manipulation check of regulatory focus.

Measures

All variables were measured on nine-point Likert scales ranging from 1 (*completely disagree*) to 9 (*completely agree*), unless otherwise indicated.

The importance participants placed on the collective action group's goal was assessed with three items (e.g., 'I think it is very important to counter gender discrimination in work situations', $M = 7.51$, $SD = 1.22$, $\alpha = .88$).

The likelihood that the collective action group would be successful was assessed with six items (e.g., 'I think the collective action group will be successful in their struggle against gender discrimination in work situations', $M = 6.13$, $SD = 1.03$, $\alpha = .76$).

Commitment to collective action was measured and treated in the same way as in Study 2.³

³ The commitment to collective action scale showed good reproducibility (.99) and scalability ($H = .80$), and fitted well to the Simplex structure ($\chi^2(3, N = 49) = 1.19$, $p = .75$, $NNFI = 1$, $CFI = 1$, $RMSEA = 0$).

Results

Manipulation check

We created promotion- and prevention-latency scores by log-transforming response times on the promotion-related (cheerfulness and dejection) and prevention-related (agitation and quiescence) emotion items (cf., Shah & Higgins, 2001). We then created a regulatory focus measure by subtracting the promotion latency scores from the prevention latency scores (with high scores indicating faster responding to the promotion items than to the prevention items which signifies promotion dominance) and analysed the effect of the manipulation of regulatory focus on this variable using ANOVA. As intended, the results revealed stronger promotion focus (and weaker prevention focus) in the promotion condition ($M = 0.44$, $SD = 1.38$) than in the prevention condition ($M = -0.46$, $SD = 1.44$, $F(1, 50) = 5.27$, $p = .02$, $\eta^2 = .10$).⁴

Commitment to collective action

The results for the commitment to collective action measure were analysed in the same way as in Studies 1 and 2. Three participants had to be excluded from these analyses because they indicated doubting the authenticity of the collective action group's website.⁵ As in Studies 1 and 2, the three-way interaction between the manipulation of regulatory focus and the importance and likelihood scales was significant ($B = .51$, $SE = .17$, $F(1, 41) = 8.87$, $p = .005$, $\Delta R^2 = .12$). In the promotion condition, we found the predicted interaction (Hypothesis 2) between the importance and likelihood of social change ($B = .19$, $SE = .09$, $F(1, 21) = 4.97$, $p = .04$, $\Delta R^2 = .09$, Figure 3a). As expected, in the promotion condition, the perceived likelihood that the collective action group would be successful increased commitment to collective action among participants who attached high importance (+1 SD) to the group's goal ($B = .34$, $SE = .14$, $F(1, 21) = 5.92$, $p = .02$), whereas it had no effect on commitment to collective action among participants who attached low importance (-1 SD) to the group's goal ($B = -.04$, $SE = .12$, $F(1, 21) < 1$, $p = .73$).

In the prevention condition, the results revealed a different interaction between the importance and likelihood measures ($B = -.82$, $SE = .40$, $F(1, 20) = 4.32$, $p = .05$, $\Delta R^2 = .15$, Figure 3b). As expected (Hypothesis 1), in the prevention condition, commitment to collective action among participants who placed high importance (+1 SD) on the collective action group's goal did not depend on the likelihood that this group would be successful ($B = -.05$, $SE = .33$, $F(1, 20) < 1$, $p = .88$), whereas it did among participants who placed low importance (-1 SD) on the group's goal ($B = 1.60$, $SE = .60$, $F(1, 20) = 7.06$, $p = .02$).

Discussion

Study 3 provided additional support for our prediction that regulatory focus influences the way in which the importance and likelihood of social change affect commitment to collective action. As hypothesized, individuals under promotion focus were motivated to engage in collective action by the perceived likelihood that it would be successful, provided that they perceived its goal as highly important. The likelihood that the

⁴ We report the untransformed mean response latencies and their standard deviations here in order to facilitate interpretation of the results.

⁵ Including these participants in the analyses did not substantially alter the results (three-way interaction $p = .006$).

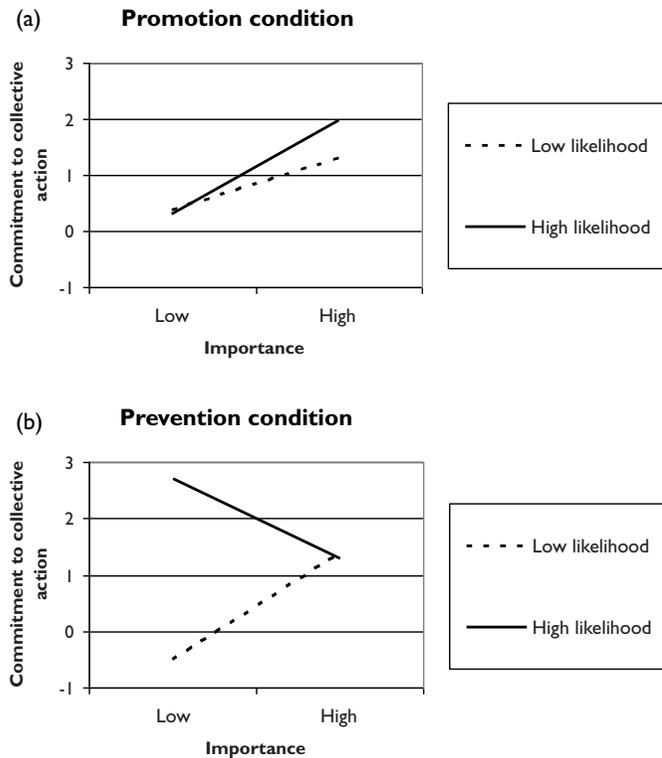


Figure 3. Commitment to collective action as a function of the importance and likelihood of social change in the promotion versus prevention condition (Study 3).

collective action group's goal would be achieved had no effect on commitment to collective action among individuals under promotion focus who perceived the group's goal as unimportant. Also as predicted, individuals under prevention focus who placed high importance on the goal of the collective action group were willing to commit to collective action regardless of the perceived likelihood that this group would reach its goal. Among individuals under prevention focus who placed relatively little importance on the collective action group's goal, commitment to collective action was increased by the likelihood that this goal would be accomplished.

Study 3 replicates and extends the results of Studies 1 and 2 by showing that the same results can be obtained using an experimental manipulation of regulatory focus, thereby demonstrating the causal influence of regulatory focus on how the decision to commit to collective action is made. Together with Studies 1 and 2, Study 3 thus confirms that the impact of the importance and likelihood of social change on commitment to collective action depends on the individuals' regulatory focus.

GENERAL DISCUSSION

The current research was designed to investigate the effect of regulatory focus on individuals' motivation to engage in collective action. Taking a self-regulation perspective allows us to provide new insights into the predictors of the motivation to engage in collective action. We argued that because individuals under promotion focus initiate

goal pursuit when they see opportunities for goal advancement, they would engage in collective action when they both placed high importance on its goal and believed attainment of this goal to be likely. By contrast, because individuals under prevention focus initiate goal pursuit when they see goal attainment as necessary, we expected that they would engage in collective action when attached high importance to the goal of the collective action, regardless of the perceived likelihood that this action would be successful. Individuals under prevention focus who placed relatively low importance on the goal of social change were expected to engage in collective action only to the extent that they believed it likely that this action would reach its goal (i.e., when goal attainment is assured).

To investigate these predictions, we used a paradigm in which women were made aware of the unfair treatment of their group in work situations. Across three studies, we used different ways to investigate the prediction that regulatory focus influences the way in which the importance and likelihood of social change affect individuals' motivation to engage in collective action. In Study 1, we assessed chronic individual differences in regulatory focus and in the perceived importance attached to a collective action group's goal, while manipulating the likelihood that this goal could be achieved through collective action. In Study 2, we used a different instrument to assess regulatory focus and manipulated both the perceived importance of the collective action group's goal and the likelihood that this goal would be achieved. Finally, in Study 3, we manipulated regulatory focus. Because across studies each independent variable was manipulated at least once, alternative causal explanations of the results can be ruled out.

Importantly, we used a behavioural measure of commitment to collective action. In all studies, the extent to which participants were actually willing to commit to collective action (e.g., by signing a petition, by becoming a member of the collective action group) served as our dependent variable. The results of the current studies thus reflect actual engagement in collective action, and not attitudes or intentions as is common in research on collective action.

The results offer consistent support for our predictions. In all studies, individuals under promotion focus who attached importance to an action group's goal were motivated to support this group to the degree that they perceived that the group would be successful in achieving this change. Additionally, in all studies we found that among individuals under prevention focus who placed high importance on the collective action group's goal, support for this group did not depend on the likelihood that the group would reach its goal. Only when they placed relatively little importance on the collective action group's goal did the likelihood that this goal would be achieved affect prevention-oriented individuals' engagement in collective action.⁶

Implications

These results show that not all individuals decide in the same way whether to engage in collective action or not. Individuals under promotion focus become motivated to engage in collective action by the perception that through collective action important social change is likely to be achieved. By contrast, attaching high importance to the goal of the collective action made prevention-oriented individuals less instrumental in their decision to engage in this action.

⁶ Although likelihood did not significantly increase commitment to collective action in Study 2 among prevention oriented individuals who placed relatively low importance on the collective action group's goal, meta-analysis of this effect (Hedges & Olkin, 1985) showed that it was reliable across the three studies ($r = .23$, $SE = .09$, $Z = 2.56$, $p = .01$).

Importantly, the current research sheds light on inconsistencies in previous work surrounding the effect of the likelihood of social change on the motivation to engage in collective action (cf., Hornsey *et al.*, 2006; Kelly, 1993). Specifically, the likelihood of social change has consistently been shown to be strong predictor of union activism (e.g., Flood, 1993; Klandermans, 1984a, 1984b, 1986), but not of anti-nuclear activism (e.g., Fox-Cardamone *et al.*, 2000; Fox & Schofield, 1989; Klandermans & Oegema, 1987; Schofield & Pavelchak, 1989). The current results may offer an explanation for this inconsistency. Specifically, engagement in anti-nuclear collective action serves the need for safety, and should as such be regulated by the prevention system. This would explain why the likelihood of social change has not been found to be a strong motivator of this form of action. By contrast, engagement in union activism aimed at attaining employee benefits could be considered behaviour that serves the need for growth, and as such should be regulated by the promotion system. This explains why the likelihood that through this action, important goals will be achieved has been found to be a strong predictor of engagement in union activism.

Furthermore, the current work suggests that depending on the societal context in which collective action takes place, different ways of trying to motivate people to participate will be most effective. By framing their message in either promotion or prevention terms collective action groups can influence their potential followers into adopting either a promotion or prevention focus. The results of the current studies suggest that doing so should also influence the basis on which these potential followers decide whether or not to engage in collective action. Specifically, in contexts in which the achievement of social change seems unlikely or even impossible (e.g., because of insufficient support or oppression by another social group), activist groups that frame their message in prevention terms, (e.g., by presenting social change as a minimally acceptable outcome), are likely to be most effective in attracting followers. By contrast, activist groups that frame their message in promotion terms (e.g., by presenting social change as a maximal ideal outcome) will be most effective in attracting followers when the achievement of social change seems likely. The present findings also suggest that activist groups adopting a promotion frame in their mobilization attempts would do well to also convey both the importance of their goal and the likelihood that this goal can be achieved in their communications. By contrast, when they use a prevention frame, emphasizing the importance of the collective goal should be enough.

Limitations and directions for future research

The current work investigated the role of regulatory focus in the way instrumental considerations motivate collective action. In doing so, it complements work that suggests that prevention (but not promotion) oriented individuals are motivated to engage in collective action by perceptions of group-based injustice or immorality (Sassenberg & Hansen, 2007; Zaal, Van Laar, Stahl, Ellemers, & Derks, 2011). In terms of theoretical integration, these results show how regulatory focus fits into the model by Van Zomeren, Spears, Fischer, and Leach (2004) in which instrumental considerations and perceptions of group-based injustice are held to form two distinct routes to engagement in collective action. However, instrumental and justice motives only form two of several possible pathways to engagement in collective action. Previous work has also identified collective identification and ideology as motives for engaging in collective action (Simon *et al.*, 1998; Van Stekelenburg *et al.*, 2009). A fruitful path for future research may therefore be to examine how regulatory focus relates to these pathways.

In the current studies, we focused on a specific class of collective action. Specifically, the forms of behaviour considered in the present studies can all be seen as normative collective action (Wright, 2001). Previous research has identified non-normative forms of collective action, such as engaging in violent protest, as an alternative way to achieve social change. These are clearly distinct from more normative and peaceful forms such as examined here (Corning & Myers, 2002; Lalonde & Cameron, 1994; Lalonde, Stroink, & Aleem, 2002; Wolfsfeld, Opp, Dietz, & Green, 1994). An interesting issue for further research would therefore be to examine how the choice is made between normative and non-normative forms of collective action, and to what extent differences in regulatory focus impact on this choice. For example, prevention-oriented individuals who perceive social change as highly important (i.e., as a necessity) might become willing to use more drastic forms of action and pursue this goal 'by any means necessary'. We are currently in the process of investigating this possibility (Zaal et al., 2011).

Conclusion

In conclusion, the results of three studies showed that regulatory focus influences how the importance and likelihood of social change affect individual commitment to collective action. For individuals under promotion focus, the likelihood that important social change will be achieved is the primary concern in their decision to engage in collective action. By contrast, as the goal of social change increases in importance, individuals under prevention focus become less concerned about the likelihood of achieving the goal when deciding whether or not to engage in collective action. Together the results show that both the likelihood and importance of social change affect commitment to collective action, but in different ways depending on whether individuals are under promotion or prevention focus.

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