

Using Political Efficacy Messages to Increase Climate Activism:  
The Mediating Role of Emotions

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## Abstract

### *Introduction and Theoretical Framework*

As the scientific community continues to stress the reality and impacts of anthropogenic climate change (e.g., IPCC, 2013), scholars and activists argue for the importance of grassroots citizen engagement in order to pressure policymakers to take meaningful action to address this growing global threat (Ockwell, Whitmarsh, & O'Neill, 2009). However, even among those segments of the American public most concerned about climate change, less than one in three have contacted an elected official about global warming (Leiserowitz, Maibach, Roser-Renouf, Feinberg, & Rosenthal, 2014). One promising yet understudied communication campaign strategy to increase citizen political engagement around climate change is to focus on efficacy messages (Roser-Renouf, Stenhouse, Rolfe-Redding, Maibach, & Leiserowitz, in press), which portray climate change as an addressable problem. Historically, much climate change campaign communication has emphasized the threat of climate change and the potentially catastrophic impacts it may have on humans and the environment (e.g., Hestres, 2014; Nisbet, 2009). This approach, however, may leave citizens feeling helpless to do anything about climate change (O'Neill & Nicholson-Cole, 2009), thereby failing to mobilize those who are already concerned about the threat of climate change and leading to further alienation and defensive avoidance among those segments of the population already doubtful about climate change.

Research in risk communication has shown that, before taking action on an issue, people must have self-efficacy, or the belief that one is capable of taking action, and response efficacy, or the belief that the action can be effective (e.g., Witte, 1992). Likewise, the political science literature points to the importance of internal efficacy (i.e., one's perceived ability to take political action) and external efficacy (i.e., the belief that the government will be responsive to public demands; Craig, Niemi, & Silver, 1990) for motivating political participation (e.g., Finkel, 1985; Rosenstone & Hansen, 2003). In a recent study, Hart and Feldman (2014) proposed a framework for promoting citizen political engagement with climate change that combines these theoretical approaches by incorporating internal (self), external, and response efficacy. To date, however, little is known about efficacy information as a message variable in a political context like climate change. To address this gap, this study adopts the framework outlined by Hart and Feldman (2014) to test the effects of messages that emphasize different forms of political efficacy on climate change activism.

One reason why efficacy information may help motivate political activism is through its effects on emotions. In particular, efficacy messages – by conveying a sense of personal or collective empowerment to address climate change – may increase hope and decrease fear. This is consistent with the theoretical predictions of the Extended Parallel Process Model (EPPM; Witte, 1992), which argues that, in a fear-based message appeal, the inclusion of efficacy

information encourages people to cognitively confront the perceived danger, thereby alleviating fear, and, in turn, motivates them to take action to alleviate the danger. Other research (e.g., Magaletta & Oliver, 1999) has linked efficacy to hope. At the same time, several studies have demonstrated that discrete emotions such as fear and enthusiasm can influence political behavior and involvement (e.g., Brader, 2005, 2006; Rudolph, Gangl, & Stevens, 2000; Valentino, Brader, Groenendyk, & Greorowicz, 2011; Valentino, Hutchings, Banks, & Davis, 2008). In the context of climate change, discrete emotions have been found to be important predictors of support for policy action to mitigate global warming (Smith & Leiserowitz, 2014), and although some recent research points to climate change-messaging strategies that may productively influence emotions (Myers, Nisbet, Maibach, & Lesierowitz, 2012), there has not yet been any research that directly links message effects on emotions to more distal outcomes like climate activism.

Thus, the specific objectives of this study are to examine the effects of messages that emphasize different forms of political efficacy related to climate change action (i.e., self, external, or response) as compared to a message that only discusses the impacts of climate change. We test the direct effects of efficacy information on hope and fear, and the indirect effects of efficacy messages on intended climate activism via these emotions. Given past research that has found that individuals respond differently to climate change-related messages on the basis of their political ideology (e.g., Hart & Nisbet, 2011), we also consider ideology as a moderating variable in order to determine whether the effects of political efficacy messages are different for liberals, conservatives, and moderates.

### *Method*

The study utilized a 4 (*type of efficacy message*: internal, external, response, or no efficacy information) x 3 (*political ideology*: liberal, moderate, conservative) experimental design. The experimental stimulus, a mock news article, was embedded within an online survey. A sample of 425 adults was recruited from a national paid opt-in online survey panel through Qualtrics Panels. Quotas were used to ensure age, gender, race, and ethnicity distributions that approximated census estimates. After consenting to participate and answering some basic demographic questions, participants were randomly assigned to see one of the four experimental messages.

Participants assigned to the internal, external, or response efficacy information conditions read a news article about the June 2014 Environmental Protection Agency (EPA) proposal to cut carbon pollution from existing power plants. The article first described the basic details of the proposal and indicated that the EPA would be taking public comment on the proposal. This core information was followed by an efficacy information paragraph that varied randomly, along with the headline of the article, according to experimental condition. In the *internal efficacy* condition, the efficacy information emphasized the ease with which individual Americans can participate in the EPA commenting period. In the *external efficacy* condition, the efficacy information emphasized the willingness of the EPA to sincerely take the American public's comments into account before finalizing the proposed regulations. In the *response efficacy* condition, the efficacy information emphasized the likely effectiveness of the proposed regulations for slowing

the negative impacts of climate change. All versions of the article concluded with a paragraph describing some of the expected impacts of climate change in the United States. Participants assigned to the *no efficacy information control* condition read an article that included only this paragraph about climate change impacts, without any information about the EPA proposal.

After reading the news article, participants were asked about their emotional reactions to the story including hope and fear, as well as their intentions to participate in each of five political actions on the issue of climate change, including contacting an elected official, participating in a rally or protest, signing a petition, volunteering, and donating money.

### *Preliminary Results*

Two-way analysis of variance (ANOVA) was used to assess the main effect of the efficacy message manipulation and its interaction with ideology on hope and fear. Results show that relative to the control condition, all three types of efficacy messages significantly increased hope among liberals and moderates. Among conservatives, only the response efficacy message increased hope relative to the control condition. For moderates, all three types of efficacy messages decreased fear, whereas for liberals, only the internal efficacy message decreased fear. Among conservatives, the response efficacy message *increased* fear. In turn, regression analysis showed that hope and fear were both positively related to climate activism. Results from a moderated mediation analysis indicated that for political liberals and moderates, all three types of efficacy messages exerted a positive indirect effect on activism via hope; however, for moderates, this was counter-balanced by a negative indirect effect via fear. For liberals, only the internal efficacy condition demonstrated a negative indirect effect via fear. For conservatives, the response efficacy condition produced positive indirect effects on activism via both hope and fear, suggesting that messages that highlight the effectiveness of climate policies may be an especially fruitful way to reach this ideological group.

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