

ARTICLE

Responses of the public towards the government in times of crisis

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Abstract

We experimentally investigate how and when the public responds to government actions during times of crisis. Public reactions are shown to follow different processes, depending on whether government performs in exemplary or unsatisfactory ways to the COVID-19 pandemic. The ‘how’ question is addressed by proposing that negative moral emotions mediate public reactions to bad government actions, and positive moral emotions mediate reactions to good government actions. Tests of mediation are conducted while taking into account attitudes and trust in the government as rival hypotheses. The ‘when’ question is studied by examining self-regulatory moderators governing the experience of moral emotions and their effects. These include conspiracy beliefs, political ideology, attachment coping styles and collective values. A total of 357 citizens of a representative sample of adult Norwegians were randomly assigned to two experimental groups and a control group, where complaining, putting pressure on the government and compliance to Covid-19 policies were dependent variables. The findings show that negative moral emotions mediate the effects of government doing badly on complaining and pressuring the government, with conspiracy beliefs moderating the experience of negative moral emotions and attachment coping moderating the effects of negative moral emotions. The results also show that positive moral emotions mediate

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the effects of government doing well on compliance with COVID-19 regulations, with political ideology moderating the experience of positive moral emotions and collective values moderating the effects of positive moral emotions.

KEYWORDS

attachment coping styles, conspiracy beliefs, moral emotions, political crises, political ideology, trust in government

INTRODUCTION

...when society places hundreds of proletarians in such a position that they inevitably meet a too early and an unnatural death...knows that these thousands of victims must perish, and yet permits these conditions to remain, its deed is murder just as surely as the deed of the single individual.... Friedrich Engels (2009) [1845]. p. 95, referring to social murder.

... are we seeing involuntary manslaughter, misconduct in public office, or criminal negligence? Laws on political misconduct or negligence are complex and not designed to react to unprecedented events, but ...we must not look on impotently as elected representatives around the world remain unaccountable and unrepentant. What standard should leaders be judged by? ...

More than a few countries have failed in their response to the virus... Where then should citizens turn for accountability, if they don't find it in their leaders and feel unsupported by experts and the media? The "social murder" of populations is more than a relic of a bygone age. It is very real today, exposed and magnified by COVID-19. It cannot be ignored or spun away. Politicians must be held to account by legal and electoral means, indeed by any national and international constitutional means necessary.

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Since the beginning of the current coronavirus pandemic, which continues to pose a threat to humanity (WHO, 2021), governments and policymakers were required to respond promptly and efficiently to the emergency to minimize the negative impact on the population. Therefore, governments around the world must impose a variety of countermeasures that require citizens' compliance. Recognizing the importance of social and behavioural science (van Bavel et al., 2020), abundant research—mainly correlational—has focussed on factors explaining adherence. Here, we take an enlarged perspective that can be applied to the current pandemic and crises more in general, using an experimental approach. We use a social-functionalist approach to public political behaviour where emotions and their self-regulation constitute adaptive responses to policies enacted by the government. The emotions that we examine are negative and positive moral emotions that the public experience towards bad and good behaviour by the government, respectively. At the same time, we augment the functioning of moral emotions to encompass evaluations (attitudes), trust in government, conspiracy beliefs, political ideology, emotional coping styles and individual differences in collective values. Our approach draws upon recent theorizing and research in different areas of social and political psychology that have tended to be studied in piecemeal ways, with the aim to provide an integrative perspective on political behaviour by the public.

Moral emotions

Whereas most emotions concern feelings people have by, and towards, the self, when something happens to the self or one achieves or fails to achieve personal goals, moral emotions concern feelings towards other people and institutions and ‘must bear on the interest or welfare of a society as a whole or at least of persons *other than the judge or agent*’ (Gewirth, 1984, p. 978, emphasis added). Moral emotions link people to culture, group norms and the social structure through self-awareness processes (Turner & Stets, 2005, 2006), but it is important to recognize that the initiation and target of such emotions are other-regarding rather than self-regarding (Tangney et al., 2007).

When people perceive other individuals or institutions damaging the welfare of society, they react towards them with the negative moral emotions of contempt, (righteous) anger and (social) disgust. Early treatments of these emotions speculated that they constitute facets of what Izard (1977) termed, the hostility triad, and empirical analyses of the emotional lexicon by use of hierarchical cluster analysis techniques showed that the three emotions were closely related cognates of a single negative emotion category (Shaver et al., 1987). However, experiments by Rozin et al. (1999) found that the negative moral emotions of contempt, anger and disgust, respectively, can be produced by manipulating conditions violating separate ethics of autonomy, community and divinity/purity (Shweder et al., 1997). Nevertheless, for each negative emotion, discriminant validity vis-à-vis the other negative emotions was not investigated, leaving in doubt whether the negative emotions are discrete emotions in such moral contexts as Rozin et al. (1999) investigated.

Hutcherson and Gross (2011) showed that disgust and contempt are overlapping terms for a single emotional state, which was separate from anger. But Simpson et al. (2006) found that anger and disgust tend to be highly correlated, while Nabi (2002) demonstrated that the experience of certain disgusting events leads to action tendencies associated with anger. Finally, Shioiri et al. (1999) discovered that many subjects in their study confused angry expressions with disgust, and disgust expressions with either anger or contempt.

Are contempt, anger and disgust discrete emotions elicited by distinct moral violations, or do they overlap substantially to reflect one underlying moral emotion? Some resolution to this issue has been proposed by suggesting that contempt, anger and disgust are at the same time distinct and equivalent, depending on the perspective taken. That is, by use of higher-order confirmatory factor analysis (CFA) applied to data from field experiments with the public, Grappi et al. (2013) demonstrated that measures of contempt, anger and disgust achieve discriminant validity for first-order factors of the emotions, but the first-order factors can be organized as sub-components of a single second-order factor. Thus, we can interpret the three more concrete negative moral emotions as reflecting a single second-order negative emotion at a higher level of abstraction, consistent with Izard's (1977) concept of the hostility triad, while recognizing that measures of contempt, anger and disgust exhibit unique variance as three first-order factors, consistent with the fully differentiated conceptualization of Rozin et al. (1999). This point of view is largely in concert with the social-functional interpretation by Hutcherson and Gross (2011). The second-order CFA depiction of the hostility triad has been replicated by Xie et al. (2015).

When people perceive other individuals or institutions promoting the welfare of society, they react towards them with the positive moral emotions of awe, gratitude and elevation, what Haidt (2003) terms, other-praising emotions. The study of positive moral emotions has been sparse in comparison with negative moral emotions, and most investigations to date have treated them separately (e.g. Chirico et al., 2016; McCullough et al., 2002; Xi et al., 2018). One study examined awe, gratitude and elevation and found that, by use of CFA procedures, awe and elevation measures loaded on one factor, and measures of gratitude loaded on a second factor (Xie et al., 2019). However, because the two factors were highly correlated ($r = .64$), the three emotions might be considered aspects of one positive moral emotion as a practical matter, at least in some contexts. By contrast to the hostility triad, the three positive moral emotions might be termed, tranquility or contentment, emotions induced by witnessing good deeds of other people or institutions.

In this study, we investigate the reactions of citizens to actions by the government. People are randomly assigned to messages from the government conveyed by the press in one of two experimental conditions (government downplaying the possibility of danger or government doing positive things to confront the danger of the COVID-19 crisis) and a neutral control condition (see [Method](#)). Negative and positive moral emotions, consistent with Haidt's (2012) social intuitionist model, constitute automatic, non-conscious reactions, respectively, to moral turpitude or moral virtue. Our study addresses first the question how do bad and good moral actions by government lead to moral responses to the government by the public. For bad government actions, we examine the effects of perceived actions on complaining (to news media, minister of health, county officials and Parliament) or putting pressure on the government to be more socially responsible and correct its bad practices. For good government actions, we investigate the effects of perceived actions on compliance to social distancing and hygienic COVID-19 policies.

Rival hypotheses for effects of manipulations on mediators (hostility triad)

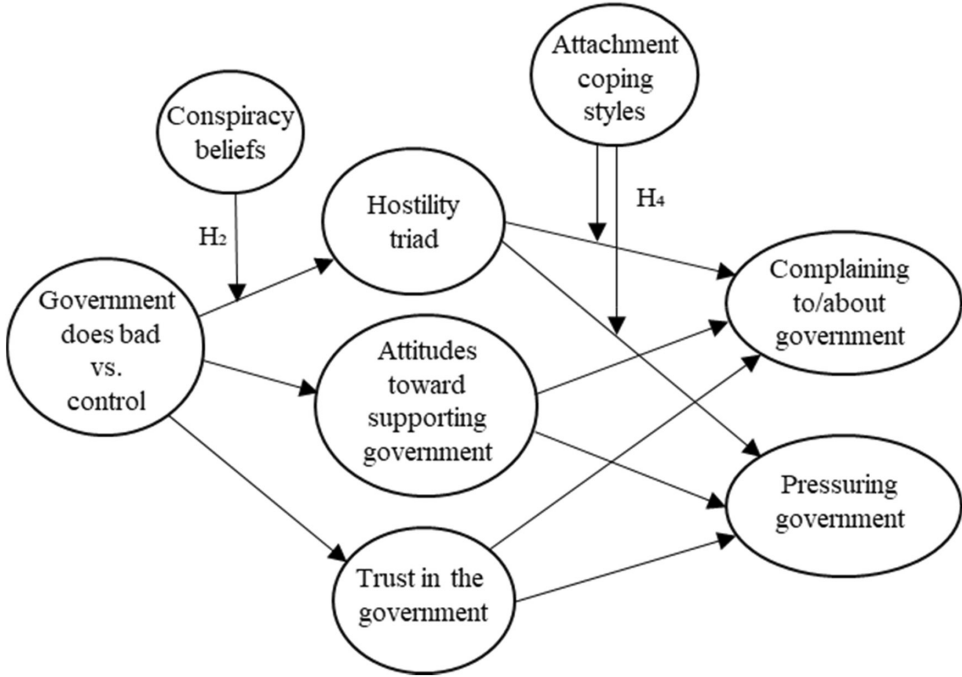
The social intuitionist model of moral behaviour rests on the 'view that there are moral truths and that when people grasp these truths they do so not by a process of ratiocination and reflection but rather by a process more akin to perception, in which one "just sees without argument that they are and must be true" (Harrison, 1967, p. 72)' (Haidt, 2001, p. 814). Although Haidt (2001, p. 818) regards 'intuitions, reasoning, and the appraisals contained in emotions' as forms of cognition, the thrust of much of his theoretical and empirical work has been on emotional manifestations of intuition. For example, he asserts that '...moral judgments are like aesthetic judgments: They are gut feelings or intuitions that happen to us quickly, automatically, and convincingly' (Haidt, 2002, p. 54).

To both provide a tougher test of the efficacy of moral emotions and to incorporate non-emotional content as rival mediators, we consider two categories of psychological processes that have served as more rational or cognitive determinants of citizen reactions to government (see [Figure 1](#)). One of these is attitude, which is 'a relatively enduring and general *evaluation* of an object, person, group, issue, or concept on a dimension ranging from negative to positive' (APA Dictionary of Psychology, emphasis added). By contrast to negative or positive emotions, which are spontaneous feelings, an evaluation is 'a careful examination ...of something, particularly to determine its worth, value, or desirability' (APA Dictionary of Psychology) and may be cognitively constructed anew or retrieved from memory as a prior stored attitude. We investigate attitudes towards supporting the government as an additional mediator of the effect of perceived bad or good behaviour of government on decisions to act in a supportive or non-supportive way.

The second psychological mediator we posit as a rival hypothesis to felt moral emotions is trust in the government (for reviews, see Citrin & Stoker, 2018; Levi & Stoker, 2000). We regard trust in the government as 'a basic evaluative orientation toward the government (see Stokes, 1962) founded on how well the government is operating according to people's normative expectations (Miller, 1974)' (Hetherington, 1998, p. 791). As an evaluation, trust in the government is in the same category of mental states as attitudes, but we draw upon work in organizations to conceive three specific facets of vertical trust in the government as a target object: '[1] ability...technical competence of the trustee...[2] benevolence...extent to which the trustor believes the trustee cares about and would expend effort to protect the trustor's well-being...[and] [3] integrity...the perception that the trustee follows a set of internalized values the trustor finds acceptable' (Hamm et al., 2019, p. 2).

When the government does something bad, this violates trust in the government. People presume the ability of the government to serve the public and expect the benevolence of the government to look out for their interests and do so justly, consistent with the authority bestowed upon them (Maloy, 2009). Violation of trust leads to actions by the public to make government accountable. When the government does something good, this confirms expectations of citizens, which, as developed below, is contingent on political ideology. When the government does something bad, this fractures expectations of citizens,

(a) Government doing bad



(b) Government doing good

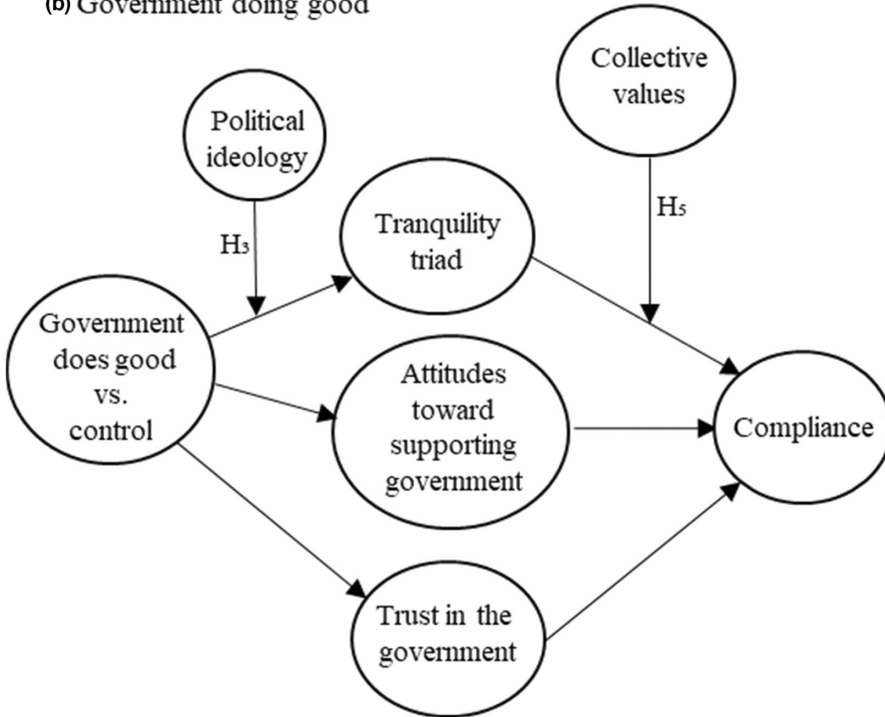


FIGURE 1 Moderated mediation models for the role of moral emotions and its regulators (note: in both models gender, age, socio-economic status, and COVID-19 exposure are control variables)

which, as developed below, is contingent on beliefs in conspiracy theories. We interpret the mediating effects of attitudes towards supporting the government and trust in the government as possible rival hypotheses to the role of moral emotions. In one sense, we posit that moral emotions will mediate perceptions of bad and good government actions on citizen responses, holding constant attitudes and trust. Therefore, we propose:

H1: Perceptions of bad (good) actions taken by the government during the COVID-19 pandemic will influence complaining and putting pressure on the government (compliance to COVID-19 policies) through the mediating effects of the hostility triad moral emotions (tranquility triad moral emotions), while taking into account attitudes towards supporting the government and trust in the government as rival hypotheses.

We thus use attitudes and trust to provide a more demanding test of the role of moral emotions.

Moderating variables: regulation of moral emotions

The effects of the manipulations on the mediators are hypothesized to be contingent on moderating variables. For government doing bad, we posit that beliefs in conspiracy theories regulate the effects; for government doing good, we propose that political ideology controls the effects (see [Figure 1](#)).

Beliefs in conspiracy theories

Minimizing responses to COVID-19 by the government constitutes a threat to public health, exacerbating underlying fears of the virus. Emotions occur automatically in reaction to stimuli threatening one's welfare, but the perception of any threat is subject to the filter of individual differences in beliefs, mindsets or biased personal orientations. Conspiracy theories represent one kind of individual difference found to reflect moral, affective or ideological commitments (e.g. Douglas et al., 2019; Keeley, 1999; Pigden, 1995). Nera et al. (2021, p.740) define conspiracy theories as 'beliefs that evil groups secretly plot to achieve nefarious goals'. Nera et al. (2021, p.740) then distinguish 'between belief in upward conspiracy theories (i.e., targeting relatively powerful groups) and downward conspiracy theories (i.e., targeting relatively powerless groups)'. In our study of conspiracy beliefs by the public and its effects on reactions to the government playing down the threat of COVID-19, we use measures of conspiracy beliefs that focus on powerful targets. In a survey, Maftai and Holman (2022) found that beliefs in conspiracies had negative main effects on perceived risk, adequacy of lockdown measures and compliance of lockdown rules for COVID-19. We desire to explain how and when conspiracy beliefs influence complaining and pressuring the government. To do this, we perform an experiment where government failing to take sufficient actions (versus a control condition) interact negatively with conspiracy beliefs to influence the hostility triad, and the hostility triad under regulation of psychological coping influences complaining and pressuring the government. In other words, we unpack the negative main effects found by Maftai and Holman (2022) by investigating certain contingencies and mediating pathways.

In particular, we expect that people exposed to government doing poorly in response to COVID-19 will react automatically and negatively in terms of moral emotions, and conspiracy beliefs will have no effect. In other words, negative moral feelings are not influenced by deliberative processes, such as entailed by thinking about conspiracy beliefs, but rather occur spontaneously as emotional responses to government action. But for people who are not exposed to government doing poorly (i.e. people in the neutral control group), conspiracy beliefs will influence negative moral emotions positively. That is, people with low levels of conspiracy beliefs should feel lower levels of negative moral emotions, whereas persons with higher levels of conspiracy beliefs should feel higher levels of negative moral emotions. As a result, we hypothesize (see [Figure 1](#)):

H2: People exposed to government doing poorly in crisis situations will respond uniformly high in negative emotions in terms of the hostility triad, whereas people not exposed to government doing poorly (i.e. people in the control condition) will rely on their conspiracy beliefs such that the greater the belief in conspiracies, the greater the negative emotions.

The moderation of the effects of the hostility triad on the dependent variables is developed below.

Political ideology

In times of crisis, citizens expect government to take positive actions to meet its fiduciary obligations to society. Positive responses by the government during the COVID-19 crisis should be emotionally gratifying in a moral sense, but we anticipate the magnitude of feelings will be accentuated for those more liberal than conservative in orientation.

Jost et al. (2003a, 2003b) proposed that the classic left–right (liberal-conservative) beliefs system can be expressed in a twofold inclination marked by (1) advocating or resisting social change and (2) rejecting or accepting inequality (or hierarchy) (see also Jost, 2017; Jost et al., 2008). When government performs well with respect to the threat of COVID-19, people respond emotionally and positively to the degree their motivational orientations favour social change and equality. Greater felt positive moral emotions should occur when political ideology of the self favours vs disfavors social change and equality. But for people reading a neutral description of the government, where neither positive nor negative actions are disclosed, we argue that respondents will react with tranquility emotions that correspond in fit between the actual political ideology of the government and their own ideology. Thus, as the government at the time of the study was a conservative one, people expressing a conservative ideology should feel more tranquil than those expressing a liberal ideology. Therefore, we hypothesize (see Figure 1):

H3: Perceptions of good actions taken by government during the COVID-19 pandemic will induce higher moral feelings in the tranquility triad for those more liberal than conservative. But for persons reading a neutral description of government, where neither good nor bad actions are described, felt tranquility emotions will depend on the fit between political ideology of the government and one's own ideology. As the government was conservative at the time of the study, we expect that higher felt tranquility will result for conservative versus liberal respondents, in the control condition.

Because we treat attitudes and trust as control variables in tests of hypotheses, we do not make specific predictions with regard to interactions between conspiracy beliefs and political ideology and these control variables.

Moderating variables: effects of moral emotions

Emotions represent a change in mental and psychological equilibrium and press for coping responses and lead to action tendencies (Frijda et al., 1989; Lazarus, 1991). The effects of negative and positive moral emotions, respectively, are hypothesized to follow asymmetric sources of self-regulation, depending on attachment coping styles and individual differences in collective values as developed below.

Attachment coping styles

When people are exposed to danger or threat, they respond by turning to characteristic attachment styles learned early in life with one or more caregivers and which persist into adulthood (Bowlby, 2008).

Three styles have been identified: secure, anxious and avoidant. The attachment system is activated by danger or threat (Shaver & Mikulincer, 2002, p. 152). Given the availability of an attachment figure and receptivity on the part of a person under stress, a certain amount of comfort can result in 'felt security', and the secure person can come to function in normal and even creative and exploratory ways. The secure attachment style develops from positive interactions with attachment figures and results in a positive sense of self-worth and confidence in dealing with threats. But limited availability of an attachment figure leads to attachment insecurity, which compounds distress. Learned anxiousness in such situations, concerning an available attachment figure, makes one more vigilant in seeking proximity to the attachment figure and amplifies efforts undertaken to do so; learned avoidance makes one more self-reliant, believing that attachment seeking is less viable, even futile (Mikulincer & Shaver, 2003). An attachment figure can be an actual person or persons (e.g. parent and friend) or an idealized and internalized actor.

Anxious and avoidant styles of coping with threat evolve developmentally with the former resulting from inconsistent and incompetent caregiving, and the latter from dismissive and rejecting caregiving (Ainsworth et al., 1978). Nevertheless, we might expect 'the anxious pattern may be associated with sensitivity and quick detection of danger and threats [and] the avoidant pattern may be associated with quick independent responses to threat' (Ein-Dor et al., 2010, p. 129). From one perspective, government might be considered an attachment figure and caregiver, and qualitative research by Lakoff (2016) reveals the operation of the metaphor of the state as parent, undergirding responses of the public to political leaders and other issues integrated into citizen's interpretation of their well-being.

Unlike many studies of attachment styles, where experience of a threat is independent from an important caregiver, and one turns to attachment figures other than the source of the threat, our investigation concerns examination of reactions of the public to a government that responds badly and is the origin of the threat itself, while being a powerful caregiver at the same time. Here, for people with anxious or avoidant attachment inclinations, exposure to threats creates attachment insecurity for both, and the government, at least temporarily, is not a viable proximity seeking target. Rather, elevated levels of insecurity lead both people with anxious and avoidant styles to focus on their felt negative moral emotions. Coping responses and action tendencies stimulated by experienced negative moral emotions then entail efforts to get government to change its behaviour.

We hypothesize that the impact of felt negative moral emotions towards government doing bad on responses to the government will be exacerbated to the extent that people score higher versus lower on anxious and avoidant coping styles. Both styles should heighten emphasis on felt negative moral emotions because the government is an important attachment figure, yet is the source of distress due to its malfeasance and shortcomings. We anticipate no interaction between negative moral emotions and secure attachment styles because feelings of comfort in dealing with stress for this style of coping should allow one to process felt negative moral emotions realistically as they actually occur and are experienced, without the hyper-distortion due to felt insecurity expected for anxious and avoidant styles. Hence, we hypothesize

H4: As felt negative moral emotions increase in response to the government downplaying the COVID-19 crisis, so too will the amount of complaining and pressuring towards the government increase, the greater the inclination to employ anxious or avoidant attachment styles for coping with stress.

Collective values

Unlike negative emotions, which are disruptive of equilibrium and induce coping efforts to reduce the source, prepare to act against, or alter one's interpretation of that disequilibrium (e.g. Lazarus, 1991), positive emotions involve a need to continue, enhance, or communicate one's good feelings. Fredrickson (2001, p. 220) terms this broaden-and-build and characterizes its implications as follows:

‘...these broadened mindsets carry indirect and long-term adaptive benefits because broadening builds enduring personal resources, which function as reserves to be drawn on later to manage future threats’. So when one experiences the expansive, self-expressive positive moral emotions, there is a felt impulse or imperative to reach out to others so as to share and perpetuate the good feelings. Moreover, we expect that felt positive moral emotions, resulting from good government actions that affect one's welfare positively, should promote feelings of reciprocity. All these can be fulfilled through compliance to such COVID-19 policies as maintaining physical distance of at least two metres, following personal hygienic recommendations when in public, not attending gatherings of people in numbers in excess of government mandates, and other practices (see [Method](#)).

We propose that the effects of felt positive moral emotions on compliance are self-regulated by individual differences. Broaden-and-build theory maintains that positive emotions enlarge momentary thought-action repertoires to elevate human flourishing (Fredrickson, 2001). We suggest that the extent to which persons value group or collective norms, the effects of positive moral emotions on the dependent variables will be enhanced. The collective self is an aspect of the social self-concept (Brewer & Gardner, 1996). It represents the degree to which one values being a member of groups and takes pride in contributing to the success of those groups (Johnson et al., 2006). People experience their collective selves in mindsets that cognitively bias their evaluations of collectivities to which they belong and prime them to support these collectivities and react to them with reciprocity when the collectivity benefits them (Brewer & Gardner, 1996; Park & Campbell, 2017; Yamagishi et al., 1998). Biddlestone et al. (2020) studied intentions to reduce the spread of COVID-19, measured with social distancing and hygienic items similar to ours (see [Table C1](#) in [Appendix C](#)), and found that collectivism influenced social distancing and hygiene intentions in a linear way. We propose that collectivism moderates the effects of felt positive moral emotions on compliance to social distancing and hygiene. Thus, we hypothesize

H5: As felt positive moral emotions increases in reaction to government performing good actions, so too will compliance to COVID-19 policies increase, the greater felt collective values.

In sum, we investigate how people respond towards government doing poorly or well in times of crises. For government de-emphasizing the consequences of COVID-19, we propose that how persons react negatively towards the government (e.g. by complaining) is explained by negative moral emotions (the hostility triad), controlling for attitudes towards and trust in government. To explain under what conditions government de-emphasizing COVID-19 leads to negative reactions, we hypothesize that conspiracy beliefs moderate the effects of the manipulation on the hostility triad, and attachment coping styles moderate the effect of the hostility triad on negative reactions towards government. For government responding positively to COVID-19, we posit that how people react favourably towards the government (e.g. by complying with government regulations) is explained by positive moral emotions (the tranquility triad), controlling for attitudes towards and trust in government. To explain under what conditions people respond favourably when government acts responsibly, we propose that political ideology (conservative versus liberal) moderates the effects of the manipulation on the tranquility triad, and collective values moderate the effects of the tranquility triad on compliance behaviours.

METHOD

Participants and procedures

Adult men and women were surveyed in October/November 2020 by a professional firm in Norway as part of a panel of 97,000 citizens it maintains for research purposes. A total of 357 persons were obtained; twenty-eight respondents were removed due to responding too fast or providing the same responses to most items to arrive at the final sample size. There were no missing responses to items. The sample consisted of 182 men (51%) and 175 women (49%). Respondent age included 12% between

18 and 24 years old, 18% 25 to 34 years old, 20% 35 to 44 years old, 17% 45 to 54 years old, 11% 55 to 64 years old and 23% 65 years and older. Education entailed 32% with a high school education and 4% with less than high school, and 64% with an undergraduate degree or higher. The sample is representative of the Norwegian population in terms of gender, age and region of country. Sample size was determined by ensuring enough respondents to achieve conventional levels of statistical power, as practiced currently with similar moderated mediation studies.

Participants were randomly assigned to one of three conditions, presenting a fictitious scenario describing the government actions taken in response to the pandemic: 103 respondents were in the negative government action condition, 113 in the positive government action condition and 141 in the control condition. The three scenarios for negative and positive government actions and neutral control are fully presented in [Appendix A](#). Each scenario was introduced with the following:

We would like you to use your imagination to travel back in time to last February and as vividly and validly as possible prepare yourself for reading the following message from the government, as if it were conveyed accurately by reporting in the press. After reading the message, we will ask you for your personal opinions and reactions in this regard. Remember, we ask that you think back to a time before the coronavirus epidemic in Norway and to try to imagine reading the information provided below as if you became aware of it in your everyday life at that time. The opinions and reactions we desire are those you would have experienced then at that time, not necessarily now.

To compute statistical power, we were unable to find a procedure to test a complex moderated moderated mediation like PROCESS Model 21 (see Montoya et al., 2021). Thus, we employed a pragmatic approach and tested power analysis for the most relevant parts of the decomposed model. We implemented post-hoc analyses for linear multiple regression models with the software package, GPower (Faul et al., 2007), with the sample size of 244 (participants in the negative government action condition plus the control condition). To check the power of the interaction on contempt, anger and disgust (H2), we considered a model with seven predictors (including four covariates). With a medium-level computed effect size ($f_2 = .15$), and an alpha level $p < .05$, the post-hoc analysis revealed that statistical power for this study was .99. To check the power of the interactions on the dependent variables (H4), we considered a model with 12 predictors (including four covariates, the effects of the mediators and those of the interactions). When considering avoidant attachment style as moderator, we obtained large effect sizes ($f_2 = .62$ for complain and .70 for pressure), and with an alpha level $p < .05$, the post-hoc analysis revealed that statistical power was 1 for both outcomes. When considering anxious attachment style as the moderator, we obtained large effect sizes ($f_2 = .62$ for complain and .69 for pressure), and with an alpha level $p < .05$, the post-hoc analysis revealed that statistical power was 1 for both outcomes.

To check the power of the interaction on the tranquilly triad (H3), we considered a model with seven predictors (including four covariates), and the sample size of 254 (participants in the positive government action condition plus the control condition). The post-hoc analysis, with a computed effect size ($f_2 = .047$), and an alpha level $p < .05$, revealed the statistical power for this study was .69. To check the power of the interactions on the dependent variable compliance (H5), we considered a model with 12 predictors (including four covariates, the effects of the mediators and those of the interactions). In this case, we obtained a high effect size ($f_2 = .32$), and with an alpha level $p < .05$, the statistical power was .99.

Measures

[Table C1](#) in [Appendix C](#) presents all items for variables. Participants in the control condition answered all the items, whereas participants in the negative or positive conditions answered only to scales related to items for [Figure 1](#), Panel A or Panel B, respectively. For each scale, the format and source of items are

TABLE 1 Correlations, means and standard deviations

	A. Government doing badly (negative emotions below diagonal ^a , control above diagonal ^b)									Means		Standard deviations	
	1	2	3	4	5	6	7	8	9	Negative	Control	Negative	Control
Hostility triad	1.00	-.20	-.17	.35	.35	.17	.04	.57	.50	1.99	1.62	1.00	.80
Attitude	-.39	1.00	.71	-.38	-.07	-.08	.04	-.27	-.45	3.80	4.19	1.03	.88
Trust govt.	-.28	.75	1.00	-.38	.01	.02	.08	-.26	-.42	3.37	3.58	1.04	.99
Conspiracy beliefs	-.03	-.03	.03	1.00	.30	.10	.01	.32	.43	2.58	2.43	1.01	1.03
Anxious	.32	-.17	-.10	.29	1.00	.40	-.08	.34	.31	2.35	2.35	.80	.83
Avoidant	.21	-.11	-.11	.36	.47	1.00	-.28	.24	.15	2.65	2.47	.85	.79
Secure	.08	.00	-.05	-.04	.18	-.18	1.00	.01	.09	3.11	3.29	.67	.81
Complaining	.56	-.26	-.15	-.04	.31	.00	.25	1.00	.78	1.68	1.67	.85	.98
Pressure	.57	-.28	-.28	-.04	.28	.08	.28	.69	1.00	1.82	1.76	.91	1.08

	B. Government doing well (positive emotions below diagonal ^c , control above diagonal ^b)									Means		Standard Deviations	
	1	2	3	4	5	6	7	8	9	Positive	Control	Positive	Control
Tranquility triad	1.00	.20	.29	-.17	.07	.04	.07	.04	2.57	2.70	2.70	.93	.83
Attitude	.34	1.00	.71	-.06	.05	.15	.05	.15	4.24	4.19	4.19	.78	.88
Trust govt.	.28	.68	1.00	-.16	.09	-.04	.09	-.04	3.65	3.58	3.58	.82	.99
Political ideology	.13	.07	.09	1.00	.11	.17	.11	.17	3.41	3.43	3.43	.77	.80
Collective Val.	.11	.24	.25	.10	1.00	.30	1.00	.30	3.88	3.84	3.84	.69	.72
Compliance	.29	.42	.33	.12	.26	1.00	.26	1.00	4.31	4.09	4.09	.72	.78

^a*n* = 103.

^b*n* = 141.

^c*n* = 113.

provided, where each scale had 5-points with anchor points provided in the table. Three formats were used to collect responses: Likert, semantic differential and unipolar scales. We used a cognate of awe, admiration, rather than awe itself as a measure of positive moral emotions because pretest interviews suggested that awe was a poor exemplar of felt positive moral emotions in Norwegian towards positive actions taken by government. Indeed, the following definition of awe in English seems to reinforce our judgement of lack of fit in Norwegian as a positive moral emotional reaction towards government doing positive things to confront the danger of COVID-19: awe is ‘an emotion variously combining dread, veneration, and wonder that is inspired by authority or by the sacred or sublime’, Merriam-Webster Dictionary. Pearsall (2007, p. 9) defines awe as ‘an overwhelming and bewildering sense of connection with a startling universe that is usually far beyond the narrow band of our consciousness’. This, too, suggests a poor fit to our context for awe.

A summary of measures follows. The hostility triad for contempt, anger and disgust was measured with three unipolar items each (e.g. scornful, very annoyed, and feeling of distaste, respectfully). The tranquility triad for gratitude, elevation and admiration was measured with two unipolar items each (e.g. thankful, inspired, and admiration, respectfully). Attitude was measured with three semantic differential items (bad–good, unfavourable–favourable, negative–positive). Six Likert items were used to measure trust in government (e.g. Our government stands by its word and makes just decisions). Three Likert items measured beliefs in conspiracy theories (e.g. Many significant world events have occurred as a result of a conspiracy). Political ideology was measured with three items on extremely conservative—extremely liberal scales (e.g. Overall, where would you place yourself on the following conservative/liberalism scale). The three dimensions of attachment styles were measured with 16, does not describe me at all to describes me very well items; examples include for anxious (I often need reassurance from others in my relationship), avoidant (I try to avoid getting too close to others) and secure (I enjoy giving support to others). Collective values were measured with 5 does not describe me at all to describes me very well items (e.g. Making a lasting contribution to groups that I belong to is very important to me). Complaining was measured with 4 not at all to very much items (e.g. I intend to complain to the minister of health or other relevant government persons). Pressuring was measured with two not at all to very much items (e.g. I would put pressure on the government to be socially responsible and correct its bad practices). Compliance was measured with 5 not at all to very much items (e.g. I intend to maintain physical separation of two metres or more from other people).

Method of analysis

We applied the PROCESS macro (Hayes, 2018) and used Model 21 to test hypotheses. PROCESS is a regression-based procedure that provides analyses of conditional indirect effects, indexes of moderated mediation, and bootstrapping estimates and confidence intervals. Tests of hypotheses controlled for gender, age, socio-economic status and number of people one knows with COVID-19.

RESULTS

Descriptive statistics

Table C1 in Appendix C presents factor loadings of items and Cronbach alpha reliabilities for scales separately for government doing badly and control for negative moral emotions, and government doing well and control for positive moral emotions. All factor loadings are high and satisfactory (range: .51–.99). Likewise, all reliabilities are satisfactory (range: .76–.95). Correlations among variables and means and standard deviations are in Table 1 for government doing badly (1A) and for government doing well (1B).

Test of moderated mediation for government responding negatively

Figure 2 summarizes the results for the model shown in Figure B1; the full findings are in Table C2 in Appendix C. As hypothesized (H2), the manipulation and belief in conspiracy theories interact negatively ($b = -.15, p = .01$) to influence the hostility triad (see Figure B1—all the significant interaction effect plots can be found in Appendix B). Likewise, as predicted (H4), the hostility triad and anxious attachment style interact significantly to influence both complaining to/about government ($b = .20, p = .001$, see Figure B2 for the plot) and pressuring the government ($b = .25, p = .000$, see Figure B3 for the plot); the hostility triad and avoidant attachment style interact significantly to influence both complaining ($b = .15, p = .03$, see Figure B4) and pressuring ($b = .21, p = .003$, see Figure B5). See Table C3 in Appendix C for full findings. Thus, H4 is confirmed. Because the direct effects of the manipulation are non-significant on complaining ($b = -.09, p = .08$) and pressuring ($b = -.09, p = .10$), the hostility triad fully mediates the effects of the manipulation on these dependent variables.

The findings for the interpretation of the significant moderated mediation effects are reported in Table 2. Panel A displays the results for the anxious attachment style as moderator. Significant positive conditional indirect effects occur only when belief in conspiracies is low, where, when anxiety increases from low to high, the effects increase for complaining, and for moderate and high levels of anxiety, the effects increase for pressuring. The index of moderated, moderated mediation is negative and significant for complaining and for pressuring. The indices of conditional moderated mediation by conspiracy, for low-to-high levels of anxiety, are all negative and significant.

Panel B in Table 2 shows the results for avoidant attachment style as moderator. Significant positive conditional indirect effects occur only when conspiracy beliefs are low or moderate, where, when avoidance increases from low to high, the effects increase for both complaining and pressuring. The index of moderated, moderated mediation is negative and significant for pressuring, but non-significant for complaining. The indices of conditional moderated mediation by conspiracy, for low-to-high levels of avoidance, are negative and significant.

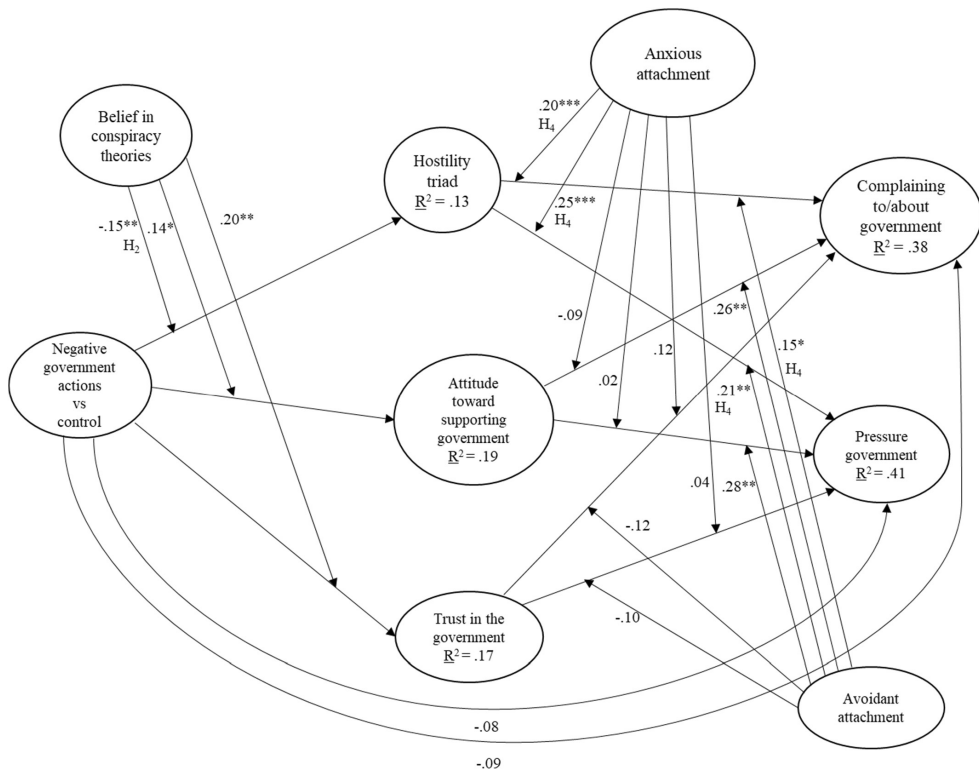


FIGURE 2 Results of moderated mediation model for government responding negatively to the COVID-19 crisis

Test of moderated mediation for government responding positively

Figure 3 illustrates the findings for the model shown in Figure 1b; the full findings are in Table C4 in Appendix C. As hypothesized (H3), the manipulation and political ideology interact positively ($b = .16, p = .03$) to influence the tranquility triad (see Figure B6 in Appendix B). Similarly, as predicted (H5), the tranquility triad and collective values interact significantly to influence compliance ($b = .16, p = .03$), confirming H5 (see Figure B7 for the plot). Because the direct effect of the manipulation on compliance is significant ($b = .10, p = .02$), the tranquility triad partially mediates the effects of the manipulation on dependent variables.

The results for the interpretation of the significant moderated mediation effects are in Table 3. Only when political ideology is low (i.e. conservative), and collective values are high, significant negative conditional indirect effects occur for compliance. The index of moderated moderated mediation is non-significant, and the index of conditional moderated mediation by political ideology is significant and positive when collective values are high.

DISCUSSION

Moral emotions are important social-functional psychological responses to perceived good and bad actions affecting the welfare of the public (Hutcherson & Gross, 2011; Tangney et al., 2007). They occur largely in automatic ways with little or no reasoning and constitute felt intuitions expressed in negative or positive moral affective reactions towards an actor doing bad or good (Haidt, 2012).

We found that negative moral emotions played important roles in answering the question, how do perceptions by the public of government downplaying the consequences of COVID-19 lead to taking actions of complaining to/about the government and pressuring the government to correct its ways? The key negative moral emotions at work here were felt contempt, anger and disgust towards the government. Similarly, we found that positive moral emotions played important roles in answering the question, how do perception by the public of government doing positive things to confront the dangers of COVID-19 lead to taking actions of complying with government mandates? The key positive moral emotions were gratitude, elevation and admiration.

The proposed roles of negative and positive moral emotions in political psychology are new hypotheses. To better justify their functioning, we provided a stringent test of their effects by examining their mediating roles, while taking into account drivers of public behaviour residing in attitudes towards supporting the government and trust in the government, which are long-standing explanations in political psychology. Our aim was to reveal the added contributions of moral emotions over and above the effects of attitudes and trust; findings fully confirm H1. With respect to government downplaying the consequences of COVID-19, the effects of perceiving these government failings were found to influence the hostility triad, attitudes and trust, contingent on beliefs in conspiracy theories. Enhanced negative hostility occurred uniformly for people confronted with the government performing poorly. People with greater conspiracy beliefs will rely on their chronic detachment from powerful agents, as they feel a lack of control (see Imhoff & Lamberty, 2020): that is, they respond by experiencing negative moral emotions towards the government independently of its performance, and by expressing more negative attitudes towards supporting the government (see Figure B8 in Appendix B. for the plot) and less trust in it (see Figure B9), in line with previous research (e.g. Mari et al., 2022).

With regard to government doing positive things to confront the danger of COVID-19, the effects of perceiving these laudatory government actions were found to influence the tranquility triad, contingent on political ideology. Observed praiseworthy actions of government lead to greater admiration, gratitude and elevation, the more liberal the leaning of respondents, in line with the importance attributed by liberals to the care of others and societal fairness (Haidt, 2012; Lakoff, 2016). No significant interactions occurred between political ideology and either attitudes towards supporting government or trust in government on the tranquility triad.

TABLE 2 Conditional indirect effects of manipulation on dependent variables: Government doing bad

Anxious attachment style as moderator					
Manipulation →Hostility Triad →Complain (pressure)					
Conspiracy	Anxiety	Effect	Boot SE	Boot LLCI	Boot ULCI
-1.16	-.85	.10 (.07)	.05 (.05)	.02 (-.00)	.21 (.18)
-1.16	-.18	.15 (.13)	.05 (.05)	.07 (.06)	.26 (.23)
-1.16	.82	.23 (.23)	.06 (.07)	.11 (.10)	.36 (.36)
.17	-.85	.05 (.03)	.02 (.02)	.01 (-.00)	.10 (.09)
.17	-.18	.07 (.06)	.03 (.03)	.02 (.02)	.13 (.12)
.17	.82	.11 (.11)	.04 (.04)	.03 (.03)	.19 (.19)
1.11	-.85	.01 (.01)	.03 (.02)	-.04 (-.03)	.06 (.06)
1.11	-.18	.02 (.01)	.04 (.03)	-.06 (-.05)	.09 (.08)
1.11	.82	.02 (.02)	.06 (.05)	-.09 (-.09)	.13 (.13)
Index of moderated moderated mediation					
	Index	Boot SE	Boot LLCI	Boot ULCI	
	-.03 (-.04)	.015 (.02)	-.06 (-.08)	-.00 (-.00)	
Indices of conditional moderated mediation by conspiracy					
Anxiety	Index	Boot SE	Boot LLCI	Boot ULCI	
-.85	-.04 (-.03)	.02 (.02)	-.10 (-.08)	-.00 (.00)	
-.18	-.06 (-.05)	.03 (.03)	-.12 (-.11)	-.01 (-.01)	
.82	-.09 (-.09)	.04 (.04)	-.17 (-.17)	-.02 (-.02)	
Avoidant attachment styles as moderator					
Manipulation →Hostility Triad →Complain (pressure)					
Conspiracy	Avoidant	Effect	Boot SE	Boot LLCI	Boot ULCI
-1.16	-.75	.16 (.12)	.06 (.05)	.06 (.04)	.28 (.23)
-1.16	-.15	.19 (.17)	.06 (.05)	.09 (.08)	.30 (.27)
-1.16	.85	.24 (.25)	.07 (.07)	.12 (.12)	.38 (.39)
.17	-.75	.07 (.06)	.03 (.03)	.02 (.01)	.14 (.12)
.17	-.15	.09 (.08)	.03 (.03)	.03 (.03)	.16 (.14)
.17	.85	.11 (.12)	.04 (.04)	.03 (.04)	.20 (.20)
1.11	-.75	.02 (.01)	.04 (.03)	-.06 (-.05)	.09 (.07)
1.11	-.15	.02 (.02)	.05 (.04)	-.07 (-.07)	.11 (.10)
1.11	.85	.02 (.02)	.06 (.06)	-.09 (-.09)	.14 (.14)
Index of moderated moderated mediation					
	Index	Boot SE	Boot LLCI	Boot ULCI	
	-.02 (-.03)	.01 (.02)	-.05(-.07)	.01(-.00)	
Indices of conditional moderated mediation by conspiracy					
Avoidant	Index	Boot SE	Boot LLCI	Boot ULCI	
-.75	-.06 (-.05)	.03 (.03)	-.13 (-.11)	-.01 (-.01)	
-.15	-.07 (-.07)	.03 (.03)	-.15 (-.13)	-.01 (-.01)	
.85	-.10 (-.10)	.04 (.04)	-.18 (-.18)	-.02 (-.02)	

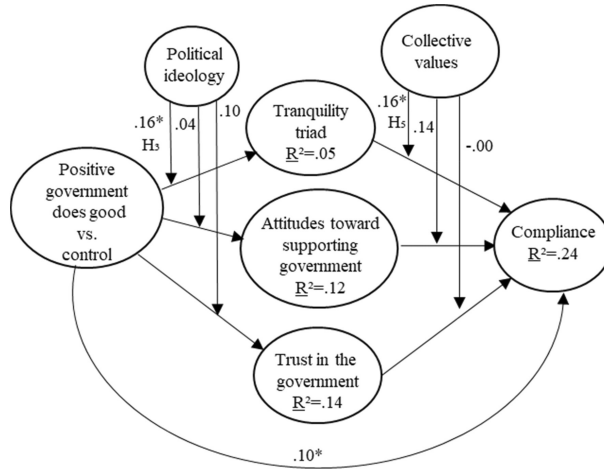


FIGURE 3 Results of moderated mediation model for government responding positively to the COVID-19 crisis

TABLE 3 Conditional indirect effects of manipulation on dependent variables: Government doing good

Collective values as moderator					
Manipulation → Tranquility Triad → Compliance					
Political ideology	Collective values	Effect	Boot SE	Boot LLCI	Boot ULCI
-.75	-.86	.01	.02	-.12	.06
-.75	-.06	-.01	.01	-.04	.01
-.75	.74	-.03	.02	-.08	-.00
-.09	-.86	.00	.01	-.01	.03
-.09	-.06	-.00	.01	-.02	.00
-.09	.74	-.01	.01	-.04	.01
.91	-.86	-.01	.01	-.04	.02
.91	-.06	.01	.01	-.01	.03
.91	.74	.02	.02	-.02	.06
Index of moderated moderated mediation					
	Index	Boot SE	Boot LLCI	Boot UCLI	
	.03	.02	-.00	.07	
Indices of conditional moderated mediation by political ideology					
Collective values	Index	Boot SE	Boot LLCI	Boot ULCI	
-.86	-.01	.02	-.05	.02	
-.06	.01	.01	-.01	.04	
.74	.03	.02	.00	.08	

Our next set of hypotheses addressed the question when felt negative and positive moral emotions lead to actions taken by the public against or in support of the government, in the sense of testing contingencies related to self-regulation of one's emotions. Negative moral emotions emerge when government is perceived culpable for danger or threat due to COVID-19. The public perceive government as a

trusted agent for looking after their needs, but to the extent that people use characteristic coping styles based on insecurity, they are more vigilant and sensitive to the degree of felt negative moral emotions and thus react stronger against government than those exhibiting less insecure coping styles. Thus, we found that the degree of reliance on both anxious and avoidance attachment coping styles accentuated effects of negative moral emotions on both complaining to/about government and pressuring the government to rectify its ways.

Positive moral emotions arise when the government recognizes its fiduciary responsibilities to the public and confronts COVID-19 in a positive way. The effects of positive moral emotions on subsequent compliance with safety mandates were hypothesized to depend on the degree of collective values held by citizens. Experienced positive moral emotions press for expression of felt indebtedness, according to the broaden-and-build framework (Fredrickson, 2001). Here, one motivation is to prolong, even enhance, and communicate one's good feelings. Another motivation may be to reciprocate in kind by supporting government. Indeed, based on research into collectivism (Brewer & Gardner, 1996; Johnson et al., 2006), we hypothesized and found that collective values boost the effects of positive moral emotions on support of government policies that promote public safety (Park & Campbell, 2017; Yamagishi et al., 1998).

Our approach explaining public responses to government actions during the COVID-19 pandemic is an eclectic one, drawing together more focussed research in multiple areas of political psychology, and expressing a new perspective that attempts to meld together a mosaic of theoretical mechanisms. The core of our theorizing rests on the transformational role of moral emotions. We suggest that how the public responds to government actions failing versus meeting expectations of citizens is captured initially by automatic negative and positive moral emotions, respectively. These constitute fundamental affective mechanisms conveying the public's disapprobation versus approval of government actions. Importantly, the effects we found for moral emotions happened even after controlling for traditional effects of attitudes towards support of government and trust in the government.

We augmented the functioning of moral emotions by considering variables regulating their experience and expression. Thus, for negative moral emotions, we showed that beliefs in conspiracy theories regulate their felt sensations, whereas extent of felt positive moral emotions are regulated by liberal political ideology. After experiencing moral emotions, we found that their effects are enlarged or magnified, depending on certain dispositions. Negative moral emotions deal with real dangers and induce coping styles where anxiety or avoidance insecurities inflate their effects on complaining about/to and pressuring government. Positive moral emotions elevate felt obligation and comity to government, to the extent that people appreciate collective values.

Future research could explore additional moderators contributing to felt moral emotions and their elaboration. Trust in science recently has been found influential in relation to perceptions of climate change (Sarathchandra & Haltinner, 2021) and adoption of vaccines (Sturgis et al., 2021), and could, in a parallel way, accentuate felt moral emotions towards government. Likewise moral identity (Aquino & Reed II, 2002), which has been found in the corporate social responsibility literature to regulate felt negative moral emotions (Xie et al., 2015), and empathy, which has been found to sensitize people to felt positive moral emotions when corporations are socially responsible (Xie et al., 2019), seem plausible moderators, governing felt moral emotions. The impact of experienced moral emotions on responses to government actions might include in future research investigation of cultural modulation wherein aspects of different cultures control the expression of emotions, interpersonal practices, and individual realization of goals (Mesquita et al., 2014).

Limitations and future research

Perceptions of harm may be important determinants of morality judgements. We did not measure perceptions of harm in our study, and therefore, the omission of harm could be a confound in our study. Research by Haidt and Hersh (2001, p.212) found that 'disgust and discomfort drive moral

condemnation' and claim that these 'are later cloaked with harm based rationalization'. However, in a mediational study, Schein et al. (2016) showed that 'harm statistically mediated the impact of disgust upon moral judgments' (Schein & Gray, 2018, p.54). Thus, harm has a direct effect on moral judgements and answers the question how disgust influences moral judgement. In our study, we examine the effects of the hostility triad (which includes disgust) on complaining to/about government and on pressuring the government. Although we did not examine harm directly, we did investigate the role of harm in an indirect sense. That is, we hypothesized and found that coping with danger or threat (as represented in anxious and avoidant attachment styles) moderated the effects of the hostility triad on the dependent variables. Future research could more directly explore the role of harm, which might function as a mediator in parallel with the hostility triad, or even cause, be caused by, or interact with the hostility triad.

In addition, the nature of harm and how the public perceives the intentionality of government deserve consideration. Under the Theory of Dyadic Morality, Schein and Gray (2018, p.37) define harm as 'an intentional agent causing damage to a vulnerable patient' (emphasis omitted). It would be interesting to investigate whether the public blames government for intentionally harming the public or whether they attribute the harm to negligence or some other reason such as trying to save costs.

Ideology and/or partisan identity may play more of a role than we gave it credit. It might be recommended that we test the moderation of the hostility triad to compliance link with political ideology. We did this with Model 58 of Process and found that $b = .13, p = .07$. Thus, although not quite significant, the conditional effect of political ideology on compliance may be an interesting process for future study. A better measure of political ideology than we used may be needed, and more development of how the metaphorical caregiver role of government functions requires greater attention too.

We investigated how and when beliefs in conspiracy theories function to influence complaining and pressuring government when government downplays responses to COVID-19. Maftai and Holman (2022) looked at the effects of civic moral disengagement on reactions to COVID-19, in addition to beliefs in conspiracy theories. Although they found mixed results for moral disengagement and treated them as independent predictors of reactions to COVID-19, we believe that moral disengagement might work through or interact with beliefs in conspiracies to influence reactions to COVID-19. Maftai and Holman (2022) found that conspiracy beliefs and moral disengagement were significantly positively correlated ($r = .24, p < .01$). Conspiracy beliefs are likely to be morally charged. Future research might explore how moral disengagement and conspiracy beliefs articulate to influence reactions to government dismissing the danger of COVID-19.

Another suggestion might be to examine moderating effects of conspiracy beliefs for the model where government takes positive actions in response to COVID-19. We had not thought of such a possibility and focussed on government failing to take constructive actions because definitions of conspiracy beliefs emphasize negative actions by groups or institutions. Our tests of the moderating role of conspiracy beliefs when government performs well reveal some significant outcomes worthy of future study. Although conspiracy beliefs did not significantly moderate the effects of the manipulation on positive moral emotions ($b = .09, p = .12$), they did have a significant main effect ($b = .14, p = .01$). Furthermore, conspiracy beliefs did not moderate the effects of the manipulation on attitudes ($b = .10, p = .09$) but did show a main effect ($b = -.23, p = .000$); conspiracy beliefs interacted with the manipulation significantly to influence trust ($b = .18, p < .001$). Finally, no significant interactions were found between conspiracy beliefs and positive moral emotions ($b = -.03, p = .54$), attitudes ($b = -.12, p = .06$), or trust ($b = .09, p = .18$) to influence compliance.

CONCLUSION

Our research shows that moral emotions play essential roles in the reactions of the public towards government actions or inactions. However, the functioning of moral emotions are under control of individual differences of citizens. When the government reacts negatively to perceived needs of the

public, the level of felt negative moral emotions is regulated by conspiracy beliefs, and the effects of negative moral emotions on complaining to/about the government and putting pressure on the government are controlled by attachment coping styles to perceived threat or danger. When the government reacts positively to perceived needs of the public, the level of felt positive moral emotions is regulated by political ideology, and the effects of positive moral emotions on compliance to government policies are controlled by degree of collective values held by citizens.

AUTHOR CONTRIBUTIONS

Richard P Bagozzi: Conceptualization; formal analysis; funding acquisition; investigation; methodology; writing – original draft; writing – review and editing. **Silvia Mari:** Conceptualization; formal analysis; investigation; methodology; writing – original draft; writing – review and editing. **Ove Oklevik:** Funding acquisition; project administration; supervision. **Chunyan Xie:** Conceptualization; formal analysis; writing – original draft.

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The order of authors is alphabetical; the authors contributed equally to this research. The authors are very grateful for comments made by two reviewers that pointed out shortcomings and suggested ways to improve the paper.

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CONFLICT OF INTEREST

The authors have no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data are available upon request.

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APPENDIX A

EXPERIMENTAL SCENARIOS

A.1 | GOVERNMENT DOWNPLAYING THE POSSIBILITY OF DANGER

‘As information was becoming available about the coronavirus contagion in China and the occurrence of initial infections in Italy and elsewhere, the government responded in the following way. People were urged not to panic and were assured that if and when cases would be detected in Norway, there would be little danger or disruption to them. The virus is expected to be relatively mild, similar to seasonal influenza, and most people will recover in a week or two. Any cases detected in Norway are unlikely to spread significantly, and danger of contagion will dissipate as the weather warms. The health system is well-prepared to handle any incidents of infection and has sufficient stocks of equipment and protective gear for its health care workers. Everyday life practices should continue as normal. People who become ill are urged to remain home, but schools, places of business and work, recreational facilities, entertainment venues, etc., indeed all human and social activities, should continue as normal. Because only a few cases of coronavirus are expected to occur, no disruption in health care, welfare, unemployment, or other social services are anticipated. In short, the coronavirus is not a concern or worry. As the Prime Minister said on television and in newspaper interviews yesterday, “The coronavirus danger to Norwegians is very low, and the government is well-prepared currently, in the unlikely event of infestation, to handle all and any emergencies. Remain optimistic and upbeat. Continue your lives as you would normally with confidence in the future.” So as to convey and reinforce her positive message, the Prime Minister announced that she and her family plan next week to travel abroad for their long-scheduled vacation and get-away, and wish everyone well’.

A.2 | GOVERNMENT DOING POSITIVE THINGS TO CONFRONT THE DANGER

‘As information was becoming available about the coronavirus contagion in China and the occurrence of initial infections in Italy and elsewhere, the government initiated a coordinated effort to prepare for, mitigate, and recover from any negative consequences of coronavirus. Initial evidence is that the coronavirus is both measurably more severe in its symptoms than seasonal influenza and spreads much more readily. Life-threatening respiratory problems and danger to vital organs have occurred with alarming frequency in cases abroad. The elderly and people with ongoing health challenges such as diabetes, high blood pressure, heart ailments, and compromised immune systems are especially vulnerable. Indeed, the coronavirus is a clear and present danger to all of us. As a consequence, the government will take the following steps. All places of business and employment will be closed until further notice, except for hospitals and grocery stores. All schools will be suspended, and no public gathering points such as concerts, movies, recreational facilities, or sport venues will be permitted to remain open. Indeed, people are to remain in their homes except to purchase food or to exercise for an hour a day alone and are expected to wear face masks and maintain physical separation of two metres or more from other people at all times. To ensure an adequate supply of materials for health care workers, efforts are underway to order additional masks, gloves, respirators, ventilators, and other protective equipment. Bed capacities in hospitals are being increased, medical and homecare hygienic cleaning equipment, disinfectants, etc. are being procured for distribution to institutions and the public. Loss of employment and loss of income for families and businesses during this crisis will be compensated for as much as possible and determined by the legislature and executive branch of the government at a later time. In short, the coronavirus is a critical concern for worry, and people are asked to cooperate and sacrifice for the common good. As the Prime Minister said on television and in newspaper interviews yesterday, “The coronavirus danger for Norwegians is very high, and the government is taking extraordinary actions to handle any and all emergencies. Remain vigilant and determined to work together to overcome this threat to our livelihood. With your cooperation and support, we will return to normal.” So as to convey and reinforce

her commitment to our people, the Prime Minister announced cancellation of her long-anticipated family vacation and promises to devote every hour of her time to working to solve this challenge to our people and country’.

A.3 | NEUTRAL GOVERNMENT SCENARIO

‘As information was becoming available about the coronavirus in China and the occurrence of initial infestations in Italy and elsewhere, the government sent advisories throughout federal agencies, local authorities, and health care facilities to inform them of these developments. Feedback is welcome from the public. Norway has an extensive network of government agencies, which include modern capabilities and professional bureaucrats who constantly monitor health matters. Equipment and supplies for responding to health problems are available and maintained up to international standards. A total of 75 hospitals and nearly 20,000 beds exist, and our semi-decentralized health system is capable. Indeed, health systems exist throughout the country, and every community is staffed with personnel working for the public good, and ready and willing to answer any questions the public would like to be informed about. All medical care givers have modern educations that are updated periodically with additional training when needed. Information is available on a wide range of health matters. Communication with the public is available by various media such as internet, telephone, and face to face visits. A regular summary and guidelines on health matters is available to the public by internet or post. Norway participates in European and World-wide forums on health matters and is a regular contributor to these as well. Health care is a public priority. As the Prime Minister said on television and in newspaper interviews yesterday, “Norway continues to maintain a public health system that is responsible and up to date. Medical care is comprehensive, modern, and efficient’.

APPENDIX B

PLOT OF INTERACTION EFFECTS

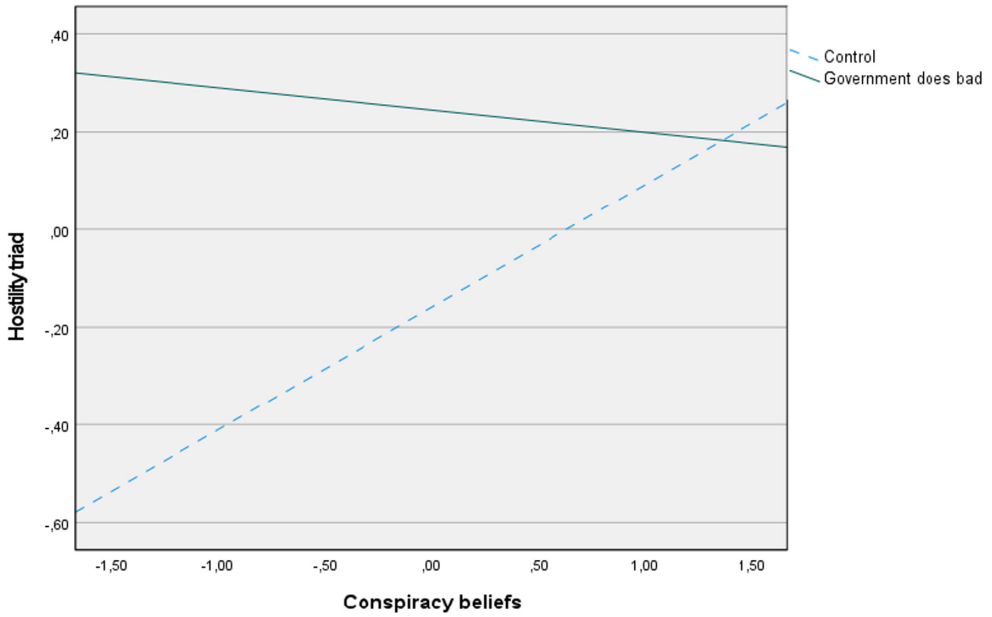


FIGURE B1 Interaction effect between experiment manipulation and conspiracy beliefs on elicitation of hostility triad

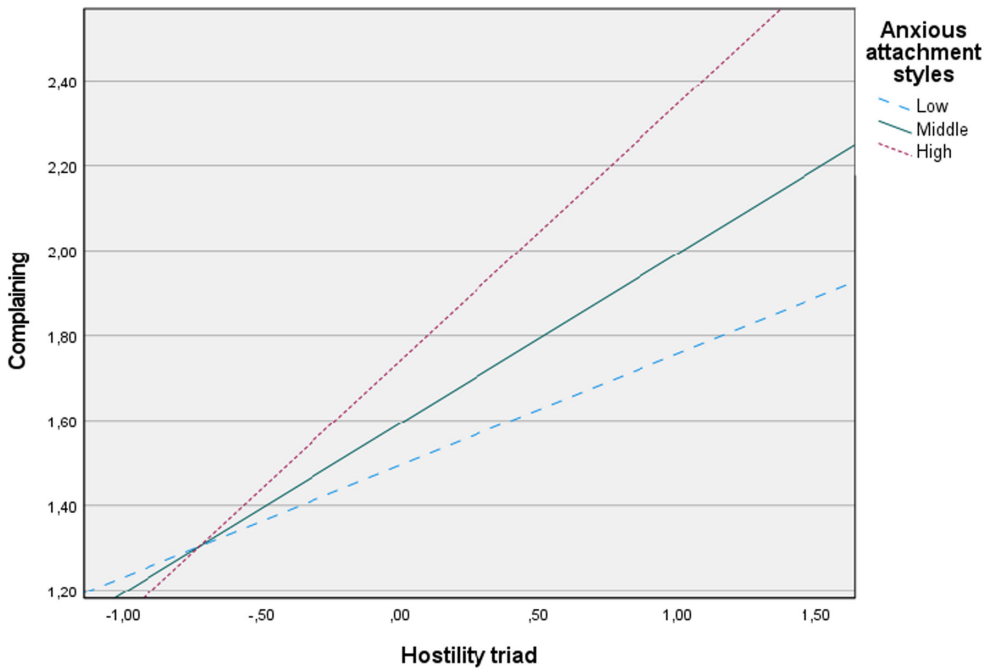


FIGURE B2 Moderating effect of anxious attachment styles on the effect of hostility triad on complaining

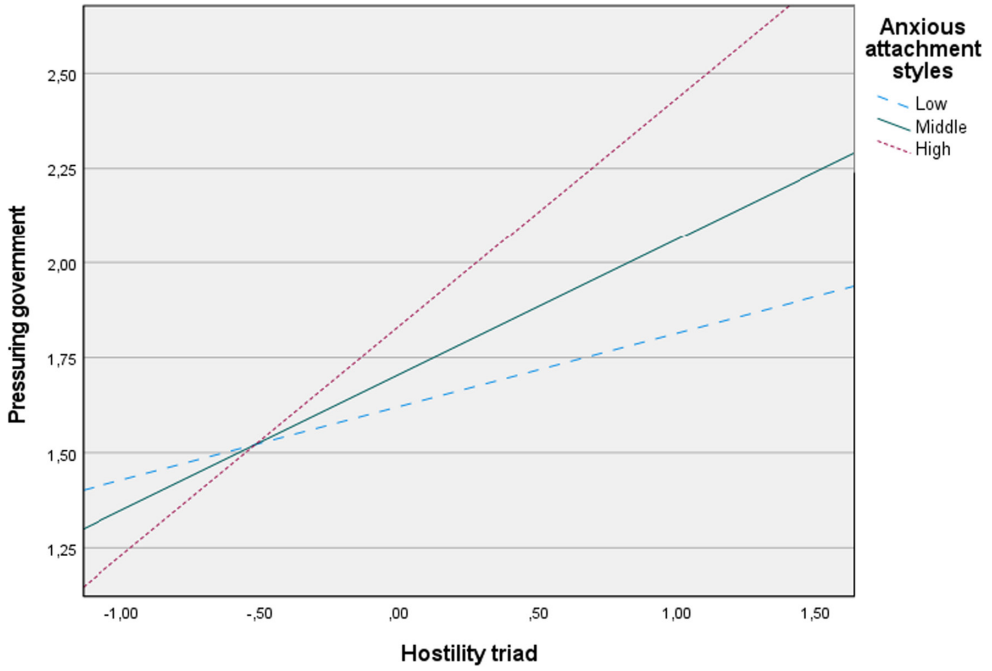


FIGURE B3 Moderating effect of anxious attachment styles on the effect of hostility triad on pressuring government

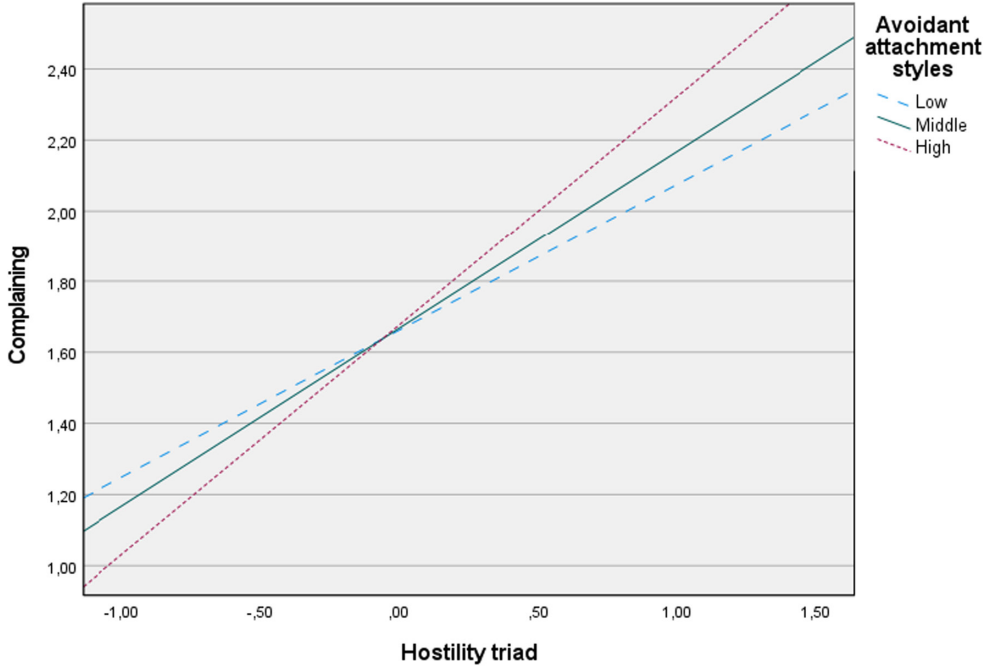


FIGURE B4 Moderating effect of avoidant attachment styles on the effect of hostility triad on complaining

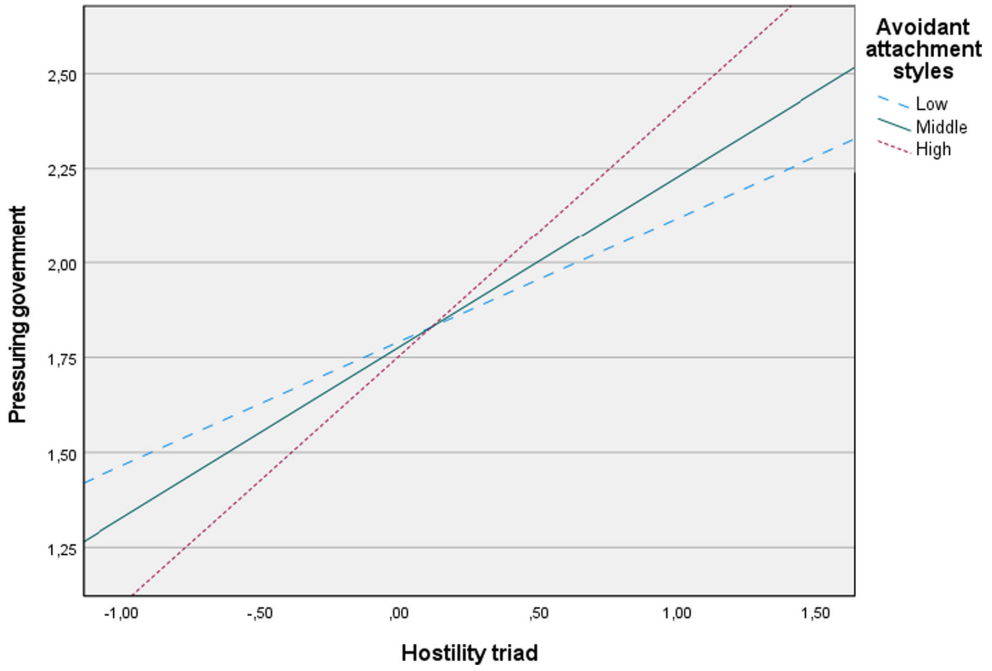


FIGURE B 5 Moderating effect of avoidant attachment styles on the effect of hostility triad on pressuring government

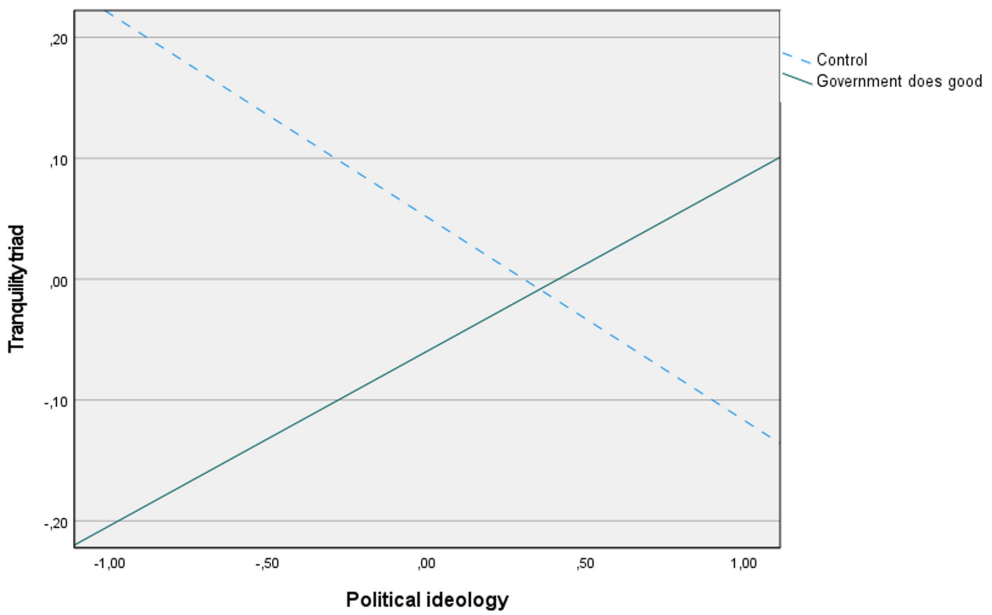


FIGURE B 6 Interaction effect between experiment manipulation and political ideology on elicitation of tranquility triad

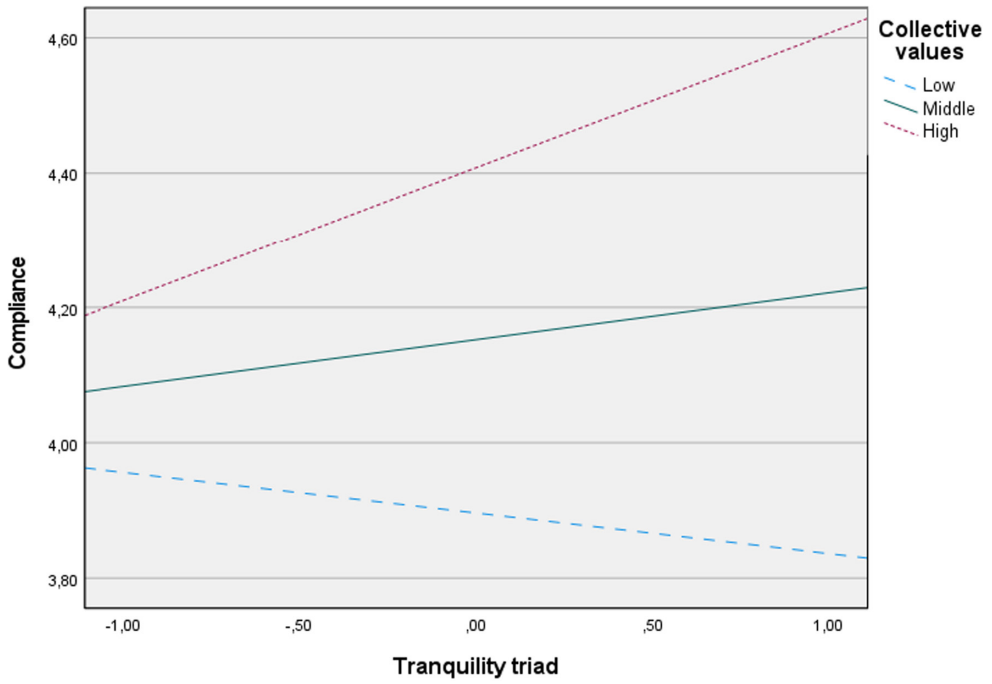


FIGURE B7 Moderating effect of collective values on the effect of tranquility triad on compliance

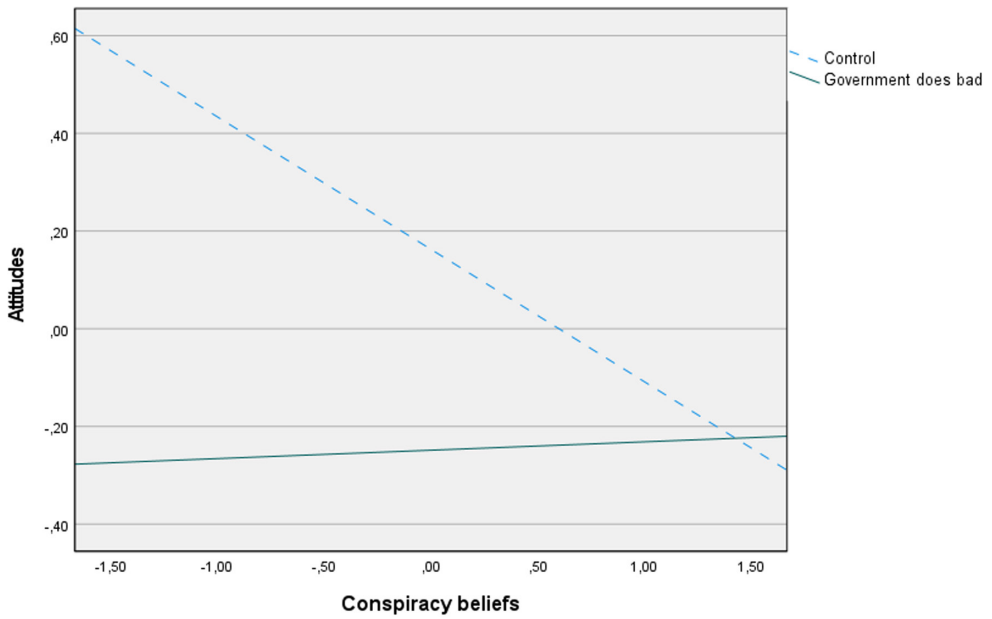


FIGURE B8 Interaction effect between experiment manipulation and conspiracy beliefs on elicitation of attitudes towards supporting government

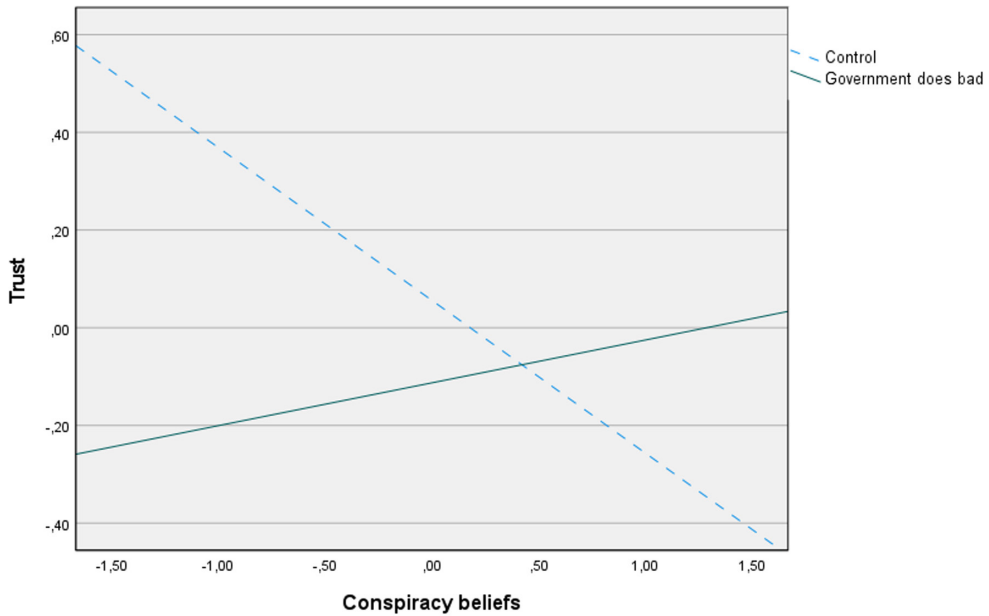


FIGURE B9 Interaction effect between experiment manipulation and conspiracy beliefs on elicitation of trust in the government

APPENDIX C

TABLE C1 Variables, questionnaire items, factor loadings, and reliabilities

Variables	Items	Factor loadings		Reliability	
		Negative/ control	Positive/ control	Negative/ control	Positive/ control
Mediators					
Hostility triad (5-point, 'not at All', 'very much', with 'moderately' in the middle) Source: Grappi et al. (2013).	Contemptuous	.83	–	.95	–
	Scornful	.85	–		
	Disdainful	.84	–		
	Mad	.82	–		
	Angry	.83	–		
	Very annoyed	.77	–		
	Disgusted	.76	–		
	Feeling of distaste	.90	–		
	Feeling of revulsion	.88	–		
Tranquility triad (5-point, 'not at All', 'very much', with 'moderately' in the middle) Source: adapted from Xie et al. (2019).	Thankful	–	.78	–	.85
	Grateful	–	.81		
	Inspired	–	.71		
	Touched	–	.64		
	Uplifted	–	.51		
	Awe	–	–		
	Admiration	–	.73		
Attitude towards supporting government (5-point semantic differential) Source: Ajzen & Fishbein (1980).	Bad-good	.94	.91	.95	.92
	Unfavourable-favourable	.92	.87		
	Negative-positive	.92	.90		

TABLE C1 (Continued)

Variables	Items	Factor loadings		Reliability	
		Negative/ control	Positive/ control	Negative/ control	Positive/ control
Mediators					
Trust in the government (5-point strongly disagree-strongly agree) Source: Muthusamy & White (2005). See also Hamm et al. (2019).	Ability				
	1. Our government is very capable of performing its role in society.	.89	.89	.96	.94
	2. Our government has the ability to serve the public well.	.89	.87		
	Benevolence				
	3. Our government looks out for what is important to the public.	.91	.88		
	4. Our government will go out of its way to help people.	.89	.85		
Integrity					
	5. Our government stands by its word and makes just decisions.	.87	.83		
	6. Sound principles guide the action of our government.	.87	.80		
Moderators					
Beliefs in conspiracy theories (5-point strongly disagree-strongly agree) Source: Mari et al. (2022)	1. Many significant world events have occurred as a result of a conspiracy.	.72	–	.83	–
	2. Despite what the authorities say, large business and/or government routinely engage in sinister, secret activities in the name of profit or gain.	.75	–		
	3. When one looks at the bigger picture, it is easy to see that many seemingly unrelated events form part of a larger plan, orchestrated by powerful others acting in secrecy.	.90	–		
Political ideology (5-point extremely conservative-extremely liberal)	1. In terms of <i>social and cultural issues</i> (e.g. abortion, separation of church and state, affirmative action), where would you place yourself on the following scale?	–	.70	–	.81
	2. In terms of <i>economic issues</i> (e.g. taxation, welfare, privatization of social security), where would you place yourself on the following scale?	–	.69		
	3. <i>Overall</i> , where would you place yourself, on the following conservatism/liberalism scale?	–	.94		
Attachment styles (5-point 'does not describe me at all' to 'describes me very well', with 'describes me moderately well' in the middle)	Anxious				
	1. I feel a certain amount of anxiety in my relationships with others.	.54	–	.86	–
	2. My desire to be close to others scares people away.	.69	–		
	3. I often need reassurance from others in my relationship.	.76	–		
	4. I worry about being neglect or ignore by others in my relationships.	.78	–		
	5. I find that others don't want to get as close as I would like.	.72	–		

(Continues)

TABLE C1 (Continued)

Variables	Items	Factor loadings		Reliability		
		Negative/ control	Positive/ control	Negative/ control	Positive/ control	
Mediators	6. I get nervous if others are not available when I need them.	.74	–			
	Avoidant		–			
	1. I want to be close to others, but I keep pulling back.	.71	–	.91	–	
	2. I don't like it when others get too close to me.	.85	–			
	3. I try to avoid getting too close to others.	.95	–			
	4. I try to maintain a certain amount of distance between myself and others.	.90	–			
	5. I am very self-reliant in my dealings with others.	–	–			
	Secure		–			
	1. I often discuss my problems and concerns with others.	.73	–	.82	–	
	2. I turn to others in times of need.	.86	–			
	3. I seek out others for comfort and reassurance.	.87	–			
	4. I enjoy giving support to others.	.48	–			
	5. Others seek me out for support and comfort in time of need.	.44	–			
	Collective values (5-point 'does not describe me at all' to 'describes me very well', with 'describes me moderately well' in the middle) Source: Johnson et al. (2006)	1. Making a lasting contribution to groups that I belong to is very important to me.	–	.63	–	.79
		2. When I become involved in a group project, I do my best to ensure its success.	–	.79		
3. I feel great pride when my team or group does well, even if I'm not the main reason for its success.		–	.79			
4. I would be honoured if I were chosen by an organization or club that I belong to, to represent them in a conference or in a meeting.		–	.55			
5. When I am part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them.		–	.57			
Dependent variables						
Complaining (5-point 'not at all' to 'very much')	1. I intend to complain to the news media.	.73	–	.93	–	
	2. I intend to complain to the minister of health or other relevant government departments.	.94	–			
	3. I intend to complain to the local county officials.	.89	–			
	4. I intend to complain to the representatives in Parliament.	.91	–			

TABLE C1 (Continued)

Variables	Items	Factor loadings		Reliability	
		Negative/ control	Positive/ control	Negative/ control	Positive/ control
Mediators					
	Pressuring (5-point 'not at all' to 'very much')	1. I would encourage people to boycott the government. 2. I would put pressure on the government to be socially responsible and correct its bad practices.	$r = .69$	–	.80
Compliance (5-point 'not at all' to 'very much')	1. I intend to maintain physical separation of two metres or more from other people.		.66	–	.82
	2. I intend to remain home with my family.		.86		
	3. I intend to go out only if it is necessary.		.85		
	4. I intend to follow the hygiene recommendation at home and in public.		.55		
	5. I intend not to attend gatherings with more people than recommended by the safety policies.		.50		

Note: References: Ajzen & Fishbein (1980). See also text of paper for remaining references.

TABLE C2 Summary of parameter estimates for Process Model 21: Government doing bad, conspiracy and anxiety as moderators

Independent variables	Endogenous mediators					
	Hostility triad (M ₁)		Attitude support government (M ₂)		Trust government (M ₃)	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Constant	.49	1.63	-1.33	-4.30***	-1.50	-4.54***
X: manipulation	.20	3.50***	-.21	-3.46***	-.08	-1.33
W: conspiracy	.13	2.27*	-.15	-2.61**	-.14	-2.35*
X *W	-.15	-2.70**	.14	2.55*	.20	3.32**
Gender	-.03	-.26	.17	1.47	.33	2.66**
Age	-.01	-1.84	.01	2.47*	.00	.82
SES	-.04	-1.11	.09	2.52*	.11	2.96**
A covid-19	.06	.94	.07	1.02	.11	1.42
Independent variables	Dependent variables					
	Complain		Pressure			
	<i>b</i>	<i>t</i>	<i>b</i>	<i>b</i>	<i>t</i>	
Constant	1.68	5.99***	2.00		6.72***	
X: Manipulation	-.09	-1.75	-.08		-1.43	
M ₁ : Hostility triad	.44	7.07***	.40		6.09***	
M ₂ : Attitude government	-.09	-1.12	-.11		-1.40	
M ₃ : Trust government	-.06	-.91	-.21		-2.82**	
Anxiety	.15	2.18*	.13		1.76	
Hostility triad * anxiety	.20	3.22***	.25		3.63***	
Attitude * anxiety	-.09	-.90	.02		.21	
Trust * anxiety	.12	1.22	.04		.38	
Gender	-.15	-1.53	-.22		-2.10*	
Age	-.00	-.81	-.00		-1.18	
SES	.05	1.58	.05		1.45	
A covid-19	-.01	-.20	-.04		-.63	

* $p < .05$, ** $p < .01$, *** $p < .001$.

TABLE C3 Summary of parameter estimates for Process Model 21: Government doing bad, conspiracy and avoidance as moderators

Independent variables	Endogenous mediators					
	Hostility triad (M ₁)		Attitude support government (M ₂)		Trust government (M ₃)	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Constant	.49	1.63	-1.33	-4.30***	-1.50	-4.54***
X: manipulation	.20	3.50***	-.21	-3.46***	-.08	-1.33
W: conspiracy	.13	2.27*	-.15	-2.61**	-.14	-2.35*
X * W	-.15	-2.70**	.14	2.55*	.20	3.32**
Gender	-.03	-.26	.17	1.47	.33	2.66**
Age	-.01	-1.84	.01	2.47*	.00	.82
SES	-.04	-1.11	.09	2.52*	.11	2.96**
A covid-19	.06	.94	.07	1.02	.11	1.42
Independent variables	Dependent variables					
	Complain		Pressure			
	<i>b</i>	<i>t</i>	<i>b</i>	<i>b</i>	<i>t</i>	
Constant	1.83	6.52***	2.15		7.24***	
X: Manipulation	-.11	-1.99*	-.09		-1.66	
M ₁ : Hostility triad	.52	8.70***	.48		7.58***	
M ₂ : Attitude government	-.06	-.73	-.10		-1.14	
M ₃ : Trust government	-.09	-1.19	-.23		-2.99**	
Avoidance	.01	.15	-.02		-.35	
Hostility triad * avoidance	.15	2.25*	.21		3.01**	
Attitude * avoidance	.26	2.90**	.28		3.01**	
Trust * avoidance	-.12	-1.45	-.10		-1.15	
Gender	-.13	-1.28	-.20		-1.90	
Age	-.00	-1.21	-.01		-1.60	
SES	.03	.98	.03		.99	
A covid-19	.01	.14	-.02		-.34	

* $p < .05$, ** $p < .01$, *** $p < .001$.

TABLE C4 Summary of parameter estimates for Process Model 21: Government doing good, political ideology and collective self as moderators

Independent variables	Endogenous mediators					
	Tranquility triad (M ₁)		Attitude support government (M ₂)		Trust government (M ₃)	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Constant	-.09	-.28	-1.60	-5.36***	-1.83	-5.60***
X: manipulation	-.06	-.98	-.01	-.24	.01	.12
W: conspiracy	-.03	-.42	.02	.39	-.05	-.69
X * W	.16	2.18*	.04	.64	.10	1.36
Gender	-.05	-.41	.29	2.84**	.46	4.13***
Age	-.00	-.83	.01	2.95**	.00	1.01
SES	.02	.04	.11	3.33***	.15	3.19***
A covid-19	.11	1.68	.03	.51	.04	.70
Independent variables	Dependent variables					
	Compliance					
			<i>b</i>			<i>t</i>
Constant			4.73			16.92***
X: Manipulation			.10			2.26*
M ₁ : Tranquility triad			.08			1.50
M ₂ : Attitude government			.33			4.33***
M ₃ : Trust government			-.16			-2.30*
Collective self			.32			4.97***
Tranquility triad * collective self			.16			2.13*
Attitude * collective self			.14			1.51
Trust * collective self			-.00			-.05
Gender			.03			.36
Age			-.00			-.51
SES			-.05			-1.76
A covid-19			-.14			-2.69**

* $p < .05$, ** $p < .01$, *** $p < .001$.