

RESEARCH ARTICLE OPEN ACCESS

Benefit Mediates the Gratitude-Morality Link and Political Ideology Moderates the Effect

Richard P. Bagozzi¹  | Chunyan Xie²  | Silvia Mari³ 

¹University of Michigan, Ann Arbor, Michigan, USA | ²Business School, Faculty of Technology, Environmental and Social Sciences, Western Norway University of Applied Sciences, Bergen, Norway | ³Department of Psychology, University of Milano-Bicocca, Milan, Italy

Correspondence: Richard P. Bagozzi (bagozzi@umich.edu)

Received: 29 November 2024 | **Revised:** 12 January 2026 | **Accepted:** 18 January 2026

Keywords: benefits | ethics | gratitude | morality | pandemics | political ideology | positive moral emotions | theory of dyadic morality

ABSTRACT

We investigate the effects on the public of government and companies acting responsibly to a threat of an emerging pandemic by use of an adaptation of the theory of dyadic morality. The effects of positive actions by government and companies are mediated by gratitude, a positive moral emotion, en route to its impact on felt benefits. Benefits then influence positive word of mouth, a kind of action tendency, but the effects are moderated by the degree of political ideology of the public. For the government, as benefit perceptions increase, positive word of mouth is higher for liberals than conservatives. For companies, positive word of mouth is greater for conservatives than liberals when benefits are perceived as low. These nuanced moderated effects reflect differences between conservatives and liberals, where liberals value social responsibility more than conservatives, whereas conservatives value company profitability more than liberals. Hypotheses are tested experimentally on two random samples of US adults ($N_1 = 177$, $N_2 = 156$). Results are discussed in the light of their implications for the theory of dyadic morality and responses to a new pandemic by government and company organisations as regulated by political ideology.

1 | Introduction

Pandemics are seen as ongoing risks, influenced by globalisation, urbanisation and environmental degradation. While predicting their timing is difficult (e.g., Heymann et al. 2024), efforts to prevent and manage them must continuously adapt. The lens of social cognition facilitates the interpretation of the public coping with social uncertainty manifest in the emergence of a new pandemic. We examine the consequences on community functioning of sociopolitical norm fulfilment and political ideology, framed within the perspective of motivated social cognition. We draw from (a) the field of community psychology by adapting the theory of dyadic morality to government and companies acting positively to benefit the public and (b) the field of political psychology to demonstrate the role of

political ideology as a moderator of the perceived benefit-to-action-tendency relationship.

The theory of dyadic morality (TDM), building on the social intuitionist model of morality (Haidt 2012), proposes that moral judgements are functions of the violation of norms, mediated by negative moral emotions (e.g., social disgust) and by perceived harm (Schein and Gray 2018). In our study, we reconceptualise the TDM to apply to fulfilment of norms and subsequent perceptions of benefits by the public. In addition, we introduce a moderator, political ideology, to investigate the conditions under which benefits influence action tendencies in the form of positive word of mouth, a kind of praise expressed by the public towards government and companies for good behaviour.

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2026 The Author(s). *Journal of Community & Applied Social Psychology* published by John Wiley & Sons Ltd.

2 | Theory of Dyadic Morality for Benefits

2.1 | Positive Moral Emotions Drive Moral Judgements

Research in moral psychology has focused mostly on moral violations where negative moral emotions and harm are primary mediators of these violations on immorality (e.g., Schein et al. 2016; Bagozzi, Xie, et al. 2024). The TDM maintains that norm violations directly lead to negative moral emotions and perceptions of harm; negative moral emotions then influence perceived harm, and perceived harm, in turn, affects moral judgements (Schein and Gray 2018).

Emotions have an important role in the TDM and are frequently the first reactions people have to norm violations. They represent intuitive responses and rest 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, 72)” (Haidt 2001, 814). More specifically, ‘...moral judgments are like aesthetic judgment: they are gut feelings or intuitions that happen to us quickly, automatically, and convincingly’ (Haidt 2002, 54). Three negative moral emotions have received attention in moral psychology—contempt, anger, and disgust (Rozin et al. 1999)—with disgust receiving special attention in the TDM (Schein et al. 2016).

By contrast to basic emotions (e.g., happy, angry, sad, fear) and self-conscious emotions (pride, shame, guilt, embarrassment, envy, jealousy), which refer directly to an agent reacting to their own behaviour or outcomes as agents, moral emotions apply to reactions towards government, organisations, or persons as agents, other than the self, doing good or bad (Gewirth 1984). Moral emotions are thus other-regarding, instead of self-regarding, emotions (Haidt 2003) and pertain to feelings with social sensibilities involving culture, groups, institutions, and social structure (Stets and Turner 2008, 2014).

Instead of moral violations, we investigate the under studied phenomena of positive moral norms, where people fulfil beliefs, expectations, rules, or values concerning how other people behave (e.g., descriptive norms) or should behave (e.g., injunctive norms; see Cialdini et al. 1991, and Reno et al. 1993, for research on such normative influence). Janoff-Bulman et al. (2009) discuss two forms of morality related to norms and self-regulation: prescriptive and proscriptive norms. Anderson and Dunning (2014) review distinctions between descriptive and injunctive norms and between social and moral norms. Any of these norms can be fulfilled and induce positive moral emotions and perceived benefits as developed below.

An important aspect of moral emotions to consider is how positive ones arise. Haidt (2003) identifies what he terms ‘other praising’ emotions, and includes three positive moral emotions in this category: awe, gratitude, and elevation. A fourth positive moral emotion, admiration, has recently been studied with regards to government acting responsibly (Bagozzi et al. 2023). According to the TDM, negative moral emotions arise in a vulnerable agent or observers as a result of another agent acting

intentionally, and the action leads to injury to the vulnerable agent (Schein and Gray 2018). In our investigation, we examine government and organisations taking laudatory actions to benefit the public. Here, an agent or actor causes benefits to a receptive agent, and the action is perceived to occur deliberately by an observer.

Positive moral emotions are efficacious determinants of perceived benefits and represent automatic, intuitive responses. We chose gratitude as the focal positive moral emotion for study. McCullough et al. (2001, 250) characterise gratitude as an emotion occurring in response to benefits provided by another person to the self: ‘... people experience gratitude most typically when they perceive that a benefactor has acted to promote their well-being’ (see also McCullough et al. 2008). Regarding the public seeing government and companies acting responsibly, people become aware of this and gain knowledge through vicariously imagining themselves as part of the public benefiting from those responsible actions (Bandura 1977). Such a process can be considered an instance of social cognition, but rather than being a target recipient of benefits by government or companies, observers of such positive actions involve judging other agents or actors who provide benefits and feel a kind of satisfaction through gratitude imagined in others benefiting from these actions (Nanay 2020). Vicarious gratitude is a representation or understanding of other-centred benefits. Thus, an observer who sees an agent acting intentionally to provide benefits to other recipients vicariously experiences gratification. In our study, the government or companies act positively to protect the public or employees, respectively, from danger occurring from a new virus.

Consequently, we hypothesise that:

H1. *An observer witnessing government or companies taking positive actions to face a developing severe pandemic threat that benefits the public or employees will lead to felt gratitude.*

2.2 | Moral Benefit

We focus on moral benefits where an agent purposely causes gain or advantage to an actor, and a sensitive observer instinctively understands or realises the benefit vicariously. Following the logic in the TDM for harm (Schein and Gray 2018), we posit that a dyadic comparison is made between norm fulfilment or realisation, perceived intuitively, that is morally endorsed or encouraged. Benefit induction follows two distinct paths. On the one hand, an indirect trajectory occurs where a benefit is instinctively seen to accomplish a norm that induces gratitude, which, in turn, prompts perceived benefit. On the other hand, a direct route happens straightaway when awareness of government or companies doing good matches a benefit-based cognitive template. We interpret perceived benefit as an evaluative reaction, which can be thought of as ‘a careful explanation or overall appraisal of something to determine its worth, value, or desirability’ (American Psychological Association Dictionary of Psychology 2018). Such an evaluation need not be deliberative or entail reflection but can be an automatic appraisal like primary appraisals that happen in emotion theory, where the significance or meaning of a stimulus event is

ascertained (Lazarus 1991). Hence, awareness of benefits occurring to others can lead spontaneously to perceived benefit through the operation of a benefit-based cognitive template. Arousal need not be necessary through the direct route to induce such an evaluation, but in the event of vicarious feelings of gratitude, perceived benefit can so be aroused parallelly as well.

Similar to the processes proposed by Schein and Gray (2018) for harm, we maintain that the benefit-based cognitive schema has four components: (1) an agent (2) acts purposefully to (3) benefit the well-being of a susceptible actor and (4) an observer reacts intuitively or vicariously to the benefit (Bagozzi, Xie, et al. 2024; Bagozzi et al. 2025). Miller and Cushman (2019, 59) describe how the reward system in the brain functions for moral values and motivation: ‘various aspects of moral value – including the subjective values of moral actions, outcomes, and their integration – are supported by a domain-general cognitive and neural architecture implicated in reward-related processes’. We build on studies conducted by Schein et al. (2016), who showed that perceived harm under the TDM mediated the disgust to immorality link. Schein et al. (2016) used a survey approach to demonstrate this in three studies. We use an experimental method to test the mediation of the gratitude-to-morality link through perceived benefit in two studies.

We propose that:

H2. *An observer witnessing government or companies taking positive actions to face a developing severe pandemic threat that benefits the public or employees will lead to perceived benefit.*

H3. *The more gratitude an observer feels towards government or companies taking exemplary actions benefiting the public or employees, the greater the felt benefit by the observer.*

2.3 | Transforming of Felt Benefits Into Action Tendencies

We investigate the effects of felt benefits on morality. Gray et al. (2012, 102) claim that ‘morality is essentially represented by a cognitive template that combines a perceived intentional agent with a perceived suffering patient’, and such a view can be seen to underpin the TDM where harm has central focus (Schein and Gray 2018). We prefer to reserve the term immorality for ‘the quality or state of being immoral; especially: unchastity’ (Merriam-Webster Dictionary 2024), where actions violate moral norms and result in harm. Examples might include lying, bribery, false or misleading advertising, incest, theft, and human trafficking. In our study, we investigate positive moral actions, which might refer to moral virtue and positive judgements (see Gert and Gert 2020, for an overview of the history and nuances of many definitions for morality).

Our focus is on felt action tendencies in response to felt benefits. Action tendencies are ‘what links experience and behavior: felt readiness can be considered a reflection of the actual state of behavioral readiness...[a state] defined as the individual’s readiness or unreadiness to engage in interaction with the

environment’ (Frijda et al. 1989, 213). From this point of view, action tendencies are automatic ways to act in a way in consonance with one’s feelings of benefits perceived. They express a kind of praise or support of the sources of benefits. This might be reflected in an impulse or spur to action directed at the agent acting admirably. Drawing on research in the corporate social responsibility literature, we identified three manifestations of advocacy or ways to express positive word of mouth towards government or companies: intent to say positive things about the government/company to friends, relatives, and other people; intent to recommend one’s friends, relatives, and other people work for the government/company; and intent to speak well of the government/company to friends, relatives, or other people (Xie et al. 2019).

Under the social intuitionist and theory of dyadic morality frameworks, a particular sequence of reactions to government or companies doing good is proposed. Initially, the public is expected to act intuitively and automatically in an affective manner. Felt moral emotions then provide a basis for evaluative judgement of harm or benefit. Action tendencies are next thought to respond to the nature and magnitude of evaluations. The direct, main effect of evaluations on action tendencies has a longstanding interpretation in attitude theory, where evaluations in the form of attitudes are believed to activate or initiate volitions in the form of intentions straight on (Eagly and Chaiken 1993; see also Eagly 2007).

A question that could be raised is whether evaluations are sufficient instigators of action tendencies. It might be argued that evaluations of harm, which are a kind of attitude towards an object, by themselves lack emotive power and the evaluations-to-action tendencies link is correlational. Problems inherent in attitudes towards objects, as opposed to behaviour, with respect to instigating action have been acknowledged in the literature (Ajzen 2005). For evaluations to influence action tendencies, a specific motivation to act might also be needed, at least in certain contexts. Political ideology might provide such motivation.

Research to date into the effect of harm or benefit on morality (e.g., Schein et al. 2016; c.f., Bagozzi, Xie, et al. 2024) has proposed and tested for main effects. Harm or benefit leads directly to immorality or morality judgements. We suggest that political ideology moderates the effects of perceived benefits on morality. Political ideology is ‘a set of ideas, beliefs, values, and opinions, exhibiting a recurring pattern, that competes deliberately as well as unintentionally over providing plans of action ...’ (Freedman 2001, 7174; see also Jost et al. 2009). Jost and Amodio (2012) view political ideology as motivated cognition where it performs an uncertainty-reducing function and also serves to provide existential security to help people cope with anxiety related to one’s own mortality. Two aspects of political ideology have been proposed: attitudes towards inequality and attitudes towards social change versus tradition (Jost, Glaser, et al. 2003a, 2003b). These facets are often captured by the liberal-conservative continuum and a bipolar scale (Jost et al. 2009).

Some research supports an interaction effect for political ideology and trust on government support (Rudolph and Evans 2005). Similarly, research finds political ideology affects support for government and vaccine safety (Lim and

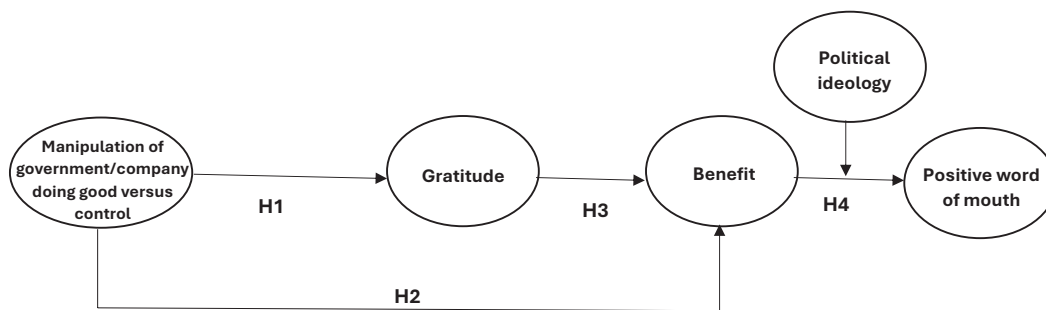


FIGURE 1 | Moderated serial mediation model for mediation of manipulated effects on dependent variables (Hayes Model 87).

Moon 2023). Liberals generally support government programs, while conservatives oppose them. In the United States, Democrats generally support government programs more than Republicans for such areas as climate change (Kennedy and Courtney 2020), and compliance with coronavirus countermeasures (McLamore et al. 2022). With regard to corporate leadership support of social responsibility in their operations, greater liberalism has been found to lead to increased support (Jeong and Kim 2020; Jiang et al. 2018).

We predict that as perceived benefits increase, so too will positive word of mouth. However, this should be quite different for the government than for companies, depending on political ideology. We expect that the effect of perceived benefits on positive word of mouth occurring from responsible government behaviours to increase, the greater the liberalism versus conservatism. Liberals should value benefits produced by government with respect to their response to an impending pandemic more strongly than conservatives when benefits are perceived to be high. Following the motivated cognition point of view on political ideology, liberals are anticipated to value and positively assess the uncertainty-reduction and existential security aspects of combating a pandemic threat more than conservatives (Jost and Amodio 2012). Research on cultural cognition, which investigates how political and cultural commitments influence information processing, also supports this interpretation (Rachlinski 2021).

By contrast, for corporations, the benefits occurring from responsible behaviours are expected to be valued more by conservatives than liberals when benefits are perceived to be low (Ketron et al. 2022). This is because conservatives emphasise stockholder wealth of companies more than social and stakeholder wealth than liberals, when benefits of corporate social actions are perceived small (Tetlock 2000). When benefits are perceived larger, no differences are anticipated between conservatives and liberals with regard to urges to spread positive word of mouth. Recognition of strong benefits should drive urges to spread positive word of mouth because conservatives and liberals both value the welfare of employees which is further tied to the success of the company in combating the pandemic.

Hence, we posit that:

H4. *The effects of perceived benefits on positive word of mouth are predicted to be dependent on political ideology (liberalism*

versus conservatism). For government, the effects are expected to be stronger for liberals than conservatives when the perceived benefits are strong, but to not differ when perceived benefits are weak. For companies, the effects are expected to be stronger for conservatives than liberals when perceived benefits are weak, but to not differ when perceived benefits are strong. For both government and companies, as benefits increase, positive word of mouth increases.

Figure 1 presents the model tested and the hypotheses. Manipulated beneficial actions compared to a control for government and companies acting admirably influence gratitude (H1) and perceived benefit (H2) directly. Gratitude affects benefit (H3), and benefit, in turn, impacts positive word of mouth, as moderated by political ideology (H4).

3 | Methods

3.1 | Procedure

We carried out two experimental studies with US participants. Participants were randomly assigned to experimental and control conditions in both Study 1 and Study 2.

Our sample consists of adults between 20 and 65 years old inclusive who were randomly selected across the United States. Since some respondents might not be likely to be experienced taking questionnaires that require relatively involved information processing, narrative scenarios were created to engage and involve respondents as much as possible. Each scenario was introduced with the same introductory paragraph indicating that a new viral pandemic was developing worldwide with a threat to public health. Then, depending on the condition, in Study 1, a second paragraph was presented with either the government acting responsibly or a neutral condition for the government condition; and in Study 2, the second paragraph in the scenario was presented with the company acting responsibly or a neutral condition for the company condition. The full scenarios are presented in the Appendix.

We used GPower to determine the a priori sample sizes for both studies for our interaction. The a priori sample size required was 159 for an effect size of 0.05 and power of 0.80. We chose initial samples of $N=200$ in each study to better ensure final sample sizes of 159 or greater, where each study had separate experimental and control groups.

3.2 | Study 1: Government Acting Responsibly

3.2.1 | Participants

The sample for the government study (Study 1) consisted of 89 men (50%) and 88 women (50%). Respondents' ages included the following breakdowns: 6% between 20 and 25 years old, 23% 26 to 35, 23% 36 to 45, 24% 46 to 55, and 24% 56 to 65, inclusive. Education entailed 37% with a high school education, 4% less than high school, and 59% with an undergraduate degree or higher. This result is typical for data collected electronically in the United States and was contracted by us with a professional research firm. The final sample was arrived at after removing 23 participants responding either too quickly or providing the same numbered responses for most items (straight-liners). The final breakdown for the conditions was 85 in the manipulation condition and 92 in the control condition. This is an original data collection to test the hypotheses.

3.2.2 | Measures

Table 1 presents the questionnaire items, factor loadings of items, and reliability of scales or correlations for two item scales. The two items measuring gratitude correlated $r = 0.87$. Factor loadings for perceived benefits were between 0.79 and 0.88. The reliability for these items was 0.87. Factor loadings for political ideology were between 0.82 and 0.89. The reliability for these items was 0.88. Factor loadings for positive word of mouth were between 0.86 and 0.92. The reliability for these items was 0.91.

3.3 | Study 2: Company Acting Responsibly

3.3.1 | Participants

Similarly, participants were randomly assigned to experimental and control conditions in Study 2. The sample for the company study consisted of 67 men (43%) and 89 women (57%). Respondent age comprised the following categories: 8% between 20 and 25 years old, 26% 26 to 35, 26% 36 to 45, 28% 46 to 55, and 22% 56 to 65, inclusive. Education entailed 36% with a high school education, 1% with less than high school, and 63% with an undergraduate degree or higher. The final sample was arrived at after removing 44 participants responding either too quickly or providing the same numbered response for most items, where final sample sizes included 74 respondents in the experimental condition and 82 in the control condition. This is an analysis of data that partially overlaps with one of three studies reported in Bagozzi et al. (2025), wherein we examine a new dependent variable, positive word of mouth, and introduce a new moderator, political ideology, to explain the benefit to word of mouth relationship, thereby investigating the conditions under which benefit influences morality, which was not examined by Bagozzi et al. (2025).

3.3.2 | Measures

As shown in Table 1, the correlation between the two items measuring gratitude was $r = 0.89$. Factor loadings for perceived

benefits were between 0.75 and 0.92. The reliability for these items was 0.87. Factor loadings for political ideology were between 0.76 and 0.92. The reliability for these items was 0.85. Factor loadings for positive word of mouth were between 0.88 and 0.93. The reliability for these items was 0.93.

Table 2 presents the correlations, means, and standard deviations for the variables shown in Figure 1. This is done separately for the manipulation and control conditions in both studies.

3.4 | Analytical Model

Hypotheses H1–H4 in both studies were tested with Hayes' (2022) Process Model 87 (see Figure 1). To test the moderation of the effect of the manipulation on gratitude by political ideology, we used Hayes' (2022) Model 84 (see Section 5.1). Bootstrapping for confidence intervals was 10,000. We report how we determined our sample sizes, all data exclusions, all manipulations and all measures in the study. The study was not preregistered. Data are available at the OSF data repository: https://osf.io/zwfm9/?view_only=9c9418375b3d424687bce12d97837c0d.

4 | Results

We present the main findings for tests of the four hypotheses for both studies, shown in Figure 1. The two studies share a similar design but differ in the focal agent under investigation: either the government or company acting responsibly with respect to an impending pandemic. Government and company acting responsibly have different implications with respect to the moderation of the effect of benefit on action tendencies by political ideology. Hypothesis H1 show the results for the evocation of gratitude by responsible actions by government and company, respectively. Hypotheses H2 and H3 present the findings for the direct and indirect effects of the experimental manipulation on perceived benefits, respectively, under each manipulation, as posited similarly by the TDM for disgust and harm (Schein and Gray 2018). Hypothesis H4 demonstrate the moderation effect of political ideology on the proximal effects of perceived benefit on the action tendency of positive word of mouth, respectively, for the two manipulations. These hypotheses test the role of norms in the TDM for benefit (Schein and Gray 2018) and reveal the central role of benefit as a mediator between gratitude and morality. In sum, the results confirm predictions of the TDM for benefit and show the essential roles of gratitude, felt benefit, and norms (political ideology).

4.1 | Study 1

Table 3 summarises the findings for Study 1 of government acting responsibly. First, as shown in the first column, the manipulation of government acting responsibly (x) induces the positive moral emotion of gratitude (M_1) ($b = 0.20$, $SE = 0.09$, $t = 2.12$, $p < 0.05$, $CI [0.01, 0.38]$), supporting H1. Next, as shown in the second column, gratitude (M_1) has a significant effect on benefit (M_2) ($b = 0.47$, $SE = 0.05$, $t = 9.80$, $p < 0.001$, $CI [0.38, 0.57]$),

TABLE 1 | Variables, questionnaire items, factor loadings and reliabilities.

Variables	Items	Factor loadings		Reliabilities	
		Study 1	Study 2	Study 1	Study 2
<i>Gratitude</i> (see Grappi et al. 2013a) 5-point, 'Not at all' to 'very much' with 'moderately' in the middle.	Thankful			$r=0.87$	$r=0.89$
	Grateful				
<i>Perceived benefit</i> (see Schein et al. 2016; Bagozzi, Xie, et al. 2024) 5-point 'very beneficial' or 'very healthful' or 'very wholesome' to 'very harmful', or 'very threatening' to 'very dangerous', with 'neither beneficial nor harmful' or 'neither healthful nor threatening' or 'Neither wholesome nor dangerous' in the middle, respectfully.	1. How beneficial or harmful do you think these actions are for yourself?	0.88	0.82	0.87	0.87
	2. How healthful or threatening do you think these actions are for yourself?	0.84	0.92		
	3. How wholesome or dangerous do you think these actions are for yourself?	0.79	0.75		
<i>Political ideology</i> (see Alves and Porto 2022; Jost et al. 2009) 5-point 'Extremely conservative' to '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?	0.84	0.76	0.88	0.85
	2. In terms of <i>economic issues</i> (e.g., taxation, welfare, privatisation of social security), where would you place yourself on the following scale?	0.82	0.76		
	3. <i>Overall</i> , where would you place yourself, on the following scale of liberalism/conservatism?	0.89	0.92		
Positive word of mouth (PWOM) (see Xie et al. 2019) 5-point 'Not at all' to 'very much' scale.	1. I intend to say positive things about the government/ company to friends, relatives and other people.	0.86	0.93	0.91	0.93
	2. I intend to recommend my friends, relatives, and other people considering working for the government/company.	0.86	0.88		
	3. I intend to speak well of the government/company to friends, relatives and other people.	0.92	0.92		

Note: Study 1—Government doing good; Study 2—Company doing good.

TABLE 2 | Correlations, means, and standard deviations for key variables.

A. Study 1: Government doing good (positive actions below diagonal^a, control condition above diagonal^b)								
	1	2	3	4	Means		Standard deviations	
					Positive	Control	Positive	Control
Gratitude	1.00	0.60	0.18	0.46	3.44	3.05	1.21	1.24
Benefit	0.60	1.00	0.14	0.58	3.50	3.39	0.90	1.03
Political ideology	0.29	0.40	1.00	0.13	2.96	3.19	0.97	1.03
PWOM	0.45	0.65	0.37	1.00	2.94	2.82	1.14	1.24

B. Study 2: Company doing good (positive actions below diagonal^a, control condition above diagonal^b)								
	1	2	3	4	Means		Standard deviations	
					Positive	Control	Positive	Control
Gratitude	1.00	0.59	0.06	0.55	3.52	2.70	1.30	1.17
Benefit	0.48	1.00	0.08	0.67	3.97	3.33	0.92	0.72
Political ideology	0.22	0.09	1.00	-0.05	2.99	3.07	1.06	0.94
PWOM	0.37	0.76	-0.07	1.00	3.86	3.02	0.97	1.05

Note: Study 1: $a_n = 85, b_n = 92$. Study 2: $a_n = 74, b_n = 82$.

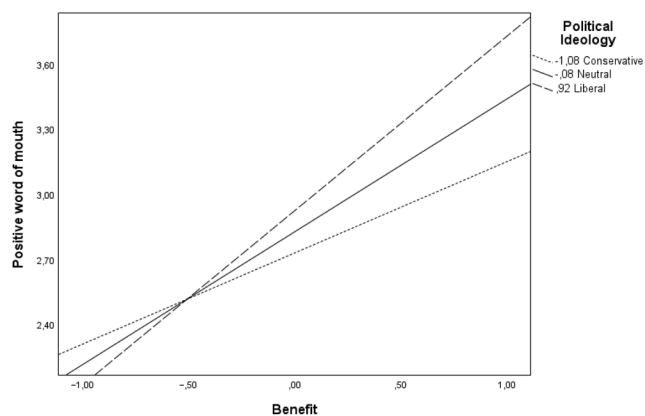
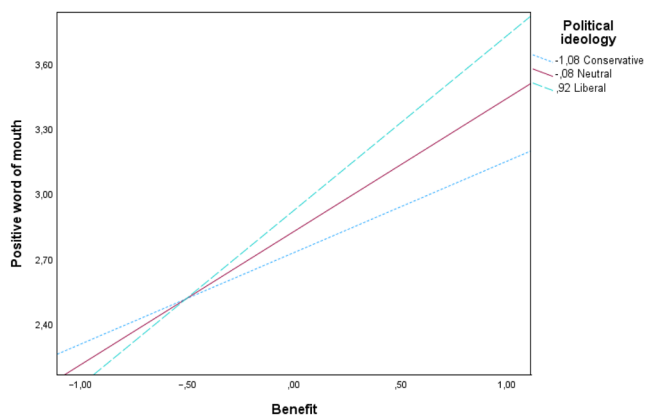
TABLE 3 | Summary of findings for Process Model 87: Government doing good and political ideology as a moderator and gratitude and benefit as mediators of the effects of manipulated government actions on action tendencies towards the government.

Independent variables	Gratitude (M_1)		Benefit (M_2)			Positive word of mouth (Y)			
	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI
Constant	3.25 (0.09)	35.07 (0.00)	3.06, 3.43	-1.53 (0.17)	-9.12 (0.00)	-1.85, -1.20	2.46 (0.24)	10.26 (0.00)	1.98, 2.93
Manipulation (X)	0.20 (0.09)	2.12 (0.04)	0.01, 0.38	-0.04 (0.06)	-0.62 (0.54)	-0.15, 0.08	-0.01 (0.07)	-0.09 (0.93)	-0.15, 0.13
Gratitude (M_1)				0.47 (0.05)	9.80 (0.00)	0.38, 0.57	0.12 (0.07)	1.65 (0.10)	-0.02, 0.26
Benefit (M_2)							0.63 (0.09)	6.98 (0.00)	0.45, 0.81
Political ideology (W)							0.10 (0.07)	1.35 (0.18)	-0.05, 0.24
$M_2 * W$							0.19 (0.06)	3.14 (0.00)	0.07, 0.31
	$R^2 = 0.03$			$R^2 = 0.36$			$R^2 = 0.42$		
	F(1, 175) = 4.93, $p < 0.04$			F(2, 174) = 48.42, $p < 0.001$			F(5, 171) = 25.14, $p < 0.001$		

Conditional indirect effect of x on positive word of mouth $x \rightarrow Gratitude \rightarrow Benefit \rightarrow Positive word of mouth$				
Political ideology	Effect	Boot se	Boot LLCI	Boot ULCI
-1.08	0.04	0.02	0.002	0.091
-0.08	0.06	0.03	0.004	0.119
0.92	0.07	0.04	0.006	0.156

Index of moderated mediation				
	Effect	Boot se	Boot LLCI	Boot ULCI
Political ideology	0.02	0.01	0.0002	0.05

a. Government doing good (Study 1)



b. Company doing good (Study 2)

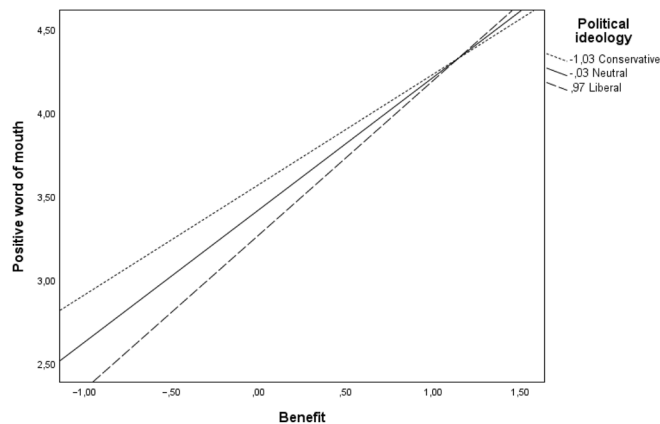
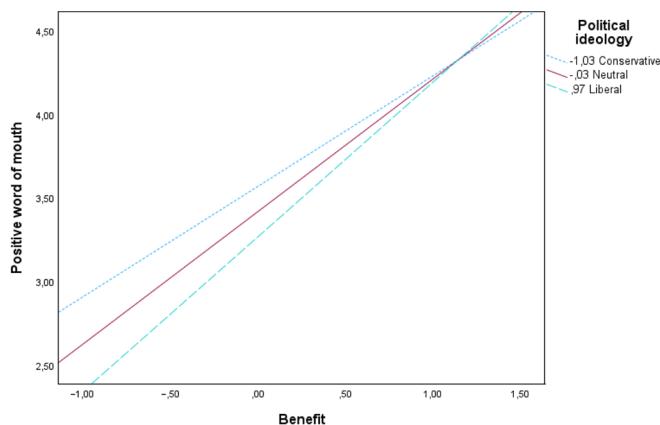


FIGURE 2 | Moderating effects of political ideology on the effect of perceived benefit on positive word of mouth. (a) Government doing good (Study 1). (b) Company doing good (Study 2).

supporting H3. But the manipulation (x) does not have a direct effect on benefit (M_2), thus not supporting H2. Therefore, there is full mediation of gratitude between manipulation and perceived benefit.

Finally, in the third column, it can be seen that political ideology (w) interacts significantly with benefit (m2) to influence action tendency of positive word of mouth (y) ($b = 0.19$, $SE = 0.06$, $t = 3.14$, $p < 0.01$, $CI [0.07, 0.31]$), as hypothesised. So, H4a is also supported. This means that liberals are more likely to praise the government's responsible actions towards a possible health crisis than conservatives when they perceive that the government acts positively to benefit the public.

A test of the conditional indirect effect of the manipulation (x) on intentions (y) confirms the contingent effect of x on y when political ideology (w) is low (effect = 0.04, $SE = 0.02$, $CI [0.002, 0.09]$), moderate (effect = 0.06, $SE = 0.03$, $CI [0.004, 0.12]$), and high (effect = 0.07, $SE = 0.04$, $CI [0.006, 0.16]$). The Index of Moderated Mediation is significant: index = 0.02, $SE = 0.01$, $CI [0.0002, 0.05]$. Finally, because the direct effect of the manipulation (x) on positive word of mouth (y) is not significant ($b = -0.01$, $SE = 0.07$, $t = -0.09$, $p = 0.93$, $CI [-0.15, 0.13]$), we may conclude that gratitude and benefit fully mediate the effects of x on y.

The top panel in Figure 2 presents the moderating effect of political ideology on the effect of perceived benefit on positive word of mouth. It can be seen that, for people exposed to information about the government acting responsibly towards the future pandemic threat, liberals are more likely to praise the government's responsible actions than conservatives, especially when the perceived benefits are high.

4.2 | Study 2

Table 4 presents the findings for Study 2 of the company positive actions. First, as shown in the first column, the manipulation of company responsibility (x) leads to the positive moral emotion of gratitude (m1) ($b = 0.41$, $SE = 0.10$, $t = 4.15$, $p < 0.001$, $CI [0.21, 0.60]$), supporting H1. Next, as presented in the second column, the manipulation (x) has a direct effect on benefit (m2) ($b = 0.17$, $SE = 0.06$, $t = 2.85$, $p < 0.01$, $CI [0.06, 0.29]$), supporting H2. Gratitude (m1) also has a significant positive effect on benefit (m2) ($b = 0.35$, $SE = 0.05$, $t = 7.68$, $p < 0.001$, $CI [0.26, 0.44]$). So, H3 is also supported.

Last, in the third column, it can be seen that benefit (m2) interacts significantly and positively with political ideology (w) to influence positive word of mouth (y) ($b = 0.13$, $SE = 0.06$, $t = 2.13$, $p < 0.05$, CI

[0.01, 0.25]), thus supporting H4. This interaction effect is plotted in the bottom panel of Figure 2. The plot shows the moderating effect of political ideology on the effect of perceived benefit on positive word of mouth. It can be seen that, when people perceive a low level of benefit from company actions (which is actually harm, given our mean-centering), conservatives are more likely to praise the company than liberals. In other words, the effect of perceived benefit on positive word of mouth is more positive for conservatives than for liberals when people perceive a low level of benefits from company acting responsibly to the health crisis.

A test of the conditional indirect effect of the manipulation (x) on positive word of mouth (y) confirms the contingent effect of x on y, when political ideology is low (effect = 0.09, SE = 0.03, CI [0.04, 0.16]), moderate (effect = 0.11, SE = 0.03, CI [0.06, 0.18]), and high (effect = 0.13, SE = 0.04, CI [0.06, 0.21]). The Index of Moderated Mediation is also significant: index = 0.02, SE = 0.01, CI [0.003, 0.04]. Finally, because the direct effect of the manipulation (x) on positive word of mouth (y) is not significant ($b = 0.11$, SE = 0.06, $t = 1.86$, $p = 0.06$, CI [-0.01, 0.23]), and there is a significant direct effect from gratitude to positive word of mouth ($b = 0.11$, SE = 0.05, $t = 1.98$, $p < 0.05$, CI [0.00, 0.21]), we may conclude that gratitude fully mediates the effects of x on y, and benefits partial mediates the effects of x on y.

5 | Could Political Ideology Moderate the Effect of Government/Company Doing Good on Gratitude/Benefits?

A reviewer suggested that political ideology could moderate the effect of government/company doing good on gratitude and on benefits. This seems to be plausible and deserves more consideration. In one study that we found pertinent to this question, Bagozzi et al. (2023) found that political ideology indeed moderated the effect of government doing good during the COVID-19 pandemic on what they called the tranquillity triad (an average of admiration, elevation, and gratitude reactions). Their study took place in Norway during the pandemic, where the government at the time was conservative. The findings showed that conservatives were less tranquil versus control, and liberals were more tranquil versus control, as a function of the interaction between the manipulation and political ideology. This reflects classic findings showing that conservatives are less supportive of government social actions than liberals. A recent study found that, among Democrats in the United States, 60% trusted the government to do what is right, while 38% did not; among Republicans, 27% and 71% answered the same question with similar responses (Hitlin and Shutava 2022). Bagozzi et al. (2023) did not study the TDM and scrutinise benefits, and they did not investigate corporate actions. The public generally differ in the nature of their support of corporations with conservatives favouring profitability and disfavouring corporate social responsibility as drivers of corporate behaviours, and liberals supporting social initiatives by corporations more than conservatives (Pomerance and Zifla 2025).

We tested Hayes' (2022) model 84 as suggested by the reviewer to provide an alternative interpretation of the role of political

ideology within government and corporations and concerning the detection of a new unknown virus. Hayes' (2022) system of models for moderation of serial mediation does not accommodate moderation at both the first and last stage of mediation in serial mediation cases. One must test each stage separately. Process Model 84 will be used to test the moderation of the path marked H1 in Figure 1 when political ideology is introduced as a moderator.

We do not propose a specific hypothesis for this alternative analysis because we had not proposed it in our original study. Rather, we regard it as a post hoc exploration.

We do not expect that political ideology will moderate the effect of good government/corporate behaviours on gratitude in the context under study for the following reasons. Early research with the social intuitionist model investigated moral wrongs of an uncommon occurrence and startling magnitude. For example, Haidt et al. (1993, 67) studied reactions of adults to the following story to see its effect on felt (social) disgust: 'A man goes to the supermarket once a week and buys a dead chicken. But before cooking the chicken, he has sexual intercourse with it. Then he cooks it and eats it'. Such seemingly rare and shocking cases might be expected to induce strong main effects.

Subsequent applied research with moral emotions proceeded from the assumption that everyday moral situations may not be strong enough to induce strong main effects but might need the co-presence of a moderator that primes or sensitises respondents to milder situations. So, several studies have found that responses of moral emotions to moral violations or moral conformance include such moderators as empathy, moral identity, and the collective self-concept (Xie et al. 2015), other regarding virtues (Grappi et al. 2013a), beliefs in conspiracy theories (Bagozzi et al. 2023), animosity (Grappi et al. 2020), and perceived risk (Grappi et al. 2013b).

The study by Bagozzi et al. (2023) with political ideology moderating the effect of government doing good on positive moral emotions occurs for a relatively moderate moral context concerning COVID-19. When COVID-19 first became a threat in early 2020, it was a very consequential event. By the time of the study by Bagozzi et al. (2023) in late 2020, the first vaccines were about to be administered and public opinion differed considerably overall and for Democrats and Republicans in the U.S. Overall, in September 2020, 42% of the public felt things were getting worse, which was down from a peak of 73% on July 13 (McCarthy 2020). But 84% of Democrats and 44% of Republicans felt COVID-19 was a major threat to health in Autumn 2020 (Deane et al. 2021). This suggests that political ideology should be taken into account. By contrast, the current study of a new unknown virus described the threat as 'spreading fast around the world' and causing 'life-threatening respiratory problems and danger to vital organs and leads to a high mortality rate' (see Appendix). This pandemic threat might be thought of as stronger than the declining and somewhat less consequential COVID-19 pandemic studied by Bagozzi et al. (2023). As a consequence, we suggest that the impact of the manipulation in the current study might be expected to have a strong main effect without the need for political ideology as a moderator.

5.1 | Test of Hayes Model 84; Moderation of Manipulation to Gratitude Path and Manipulation to Benefits Path by Political Ideology

Table A1 in the Appendix presents the findings for Model 84 applied to the manipulation of government doing good and its effects on gratitude and benefits, as moderated by political ideology. The interactions in both cases are nonsignificant ($b=0.07$, CI $[-0.11, 0.25]$ for gratitude; $b=0.08$, CI $[-0.03, 0.20]$ for benefits). The manipulation had a significant main effect on gratitude ($b=0.23$, CI $[0.05, 0.41]$) but not benefits ($b=-0.02$, CI $[-0.13, 0.10]$). Political ideology had significant main effects on gratitude ($b=0.29$, CI $[0.11, 0.47]$) and on benefits ($b=0.13$, CI $[0.001, 0.24]$). Finally, benefits had a significant effect on positive word of mouth ($b=0.64$, CI $[0.46, 0.83]$).

Table A2 in the Appendix shows the findings for Model 84 applied to the manipulation of the company doing good and its effects on gratitude and benefits, as moderated by political ideology. The interactions in both cases are nonsignificant ($b=0.10$, CI $[-0.10, 0.29]$ for gratitude; $b=-0.02$, CI $[-0.14, 0.09]$ for benefits). The manipulation had a significant main effect on gratitude ($b=0.42$, CI $[0.22, 0.61]$) and benefits ($b=0.17$, CI $[0.06, 0.29]$). Political ideology had nonsignificant main effects on gratitude ($b=0.16$, CI $[-0.03, 0.36]$) and on benefits ($b=0.01$, CI $[-0.10, 0.13]$). Finally, benefits had a significant effect on positive word of mouth ($b=0.80$, CI $[0.64, 0.97]$).

6 | Discussion

In our experiments, the positive moral emotion of gratitude and perception of benefit mediated the link between the cognitive template instantiating benefit and the action tendency of expressing positive word of mouth. Analogous to research on harm under the theory of dyadic morality (Schein and Gray 2018; Gray et al. 2012), we propose that benefit is created through a synthesis characterised by an agent acting purposively in a way that enhances or strengthens a receptive actor, whereby a witness perceives the benefits and acts intuitively towards the agent. The intuitive responses involve felt gratitude and sensed benefit experienced on a continuum. Felt benefit positively induces action tendencies, as moderated by political ideology.

Under the TDM, social cognition initiates the response of the public through the activation of a cognitive template or prototype with moral import. A comparison is made to normative exigencies such as injunctive or descriptive normative expectations and prescriptive or proscriptive norms. Two pathways transpire from the cognitive template. One is a direct trigger of perceived or felt benefit. The second is arousal of the moral vicarious emotion of gratitude. Vicarious gratitude then induces felt benefits. Thus, the TDM supplies a mechanism for the role of benefit: norm realisation or fulfilment 'x' leads people to reflexively ask, 'is x moral', and an affirmative answer leads both directly to perceived benefit and indirectly to benefit through gratitude (c.f., Schein and Gray 2015, 1149). Here activation of a benefit-based template initiates dyadic morality.

The perception of benefit is therefore a subjective response grounded in ambiguous perceptions of the minds of others: a

judgement of morality requires seeing a mind capable of doing good, judgements of benefit require a mind capable of experiencing joy, delight, or pleasure in the outcomes of others (Schein and Gray 2015).

Following Schein and Gray (2015), we suggest that liberals and conservatives monitor or obey the same dyadic template. For both conservatives and liberals, as perceived benefits increase, so too do experiences of positive word of mouth. But effects are nuanced depending on whether the government or companies do good. When government does good, liberals provide greater word of mouth than conservatives, although both liberals and conservatives recognise benefits occurring to the public when government does good responding to an impending pandemic; liberals more than conservatives accept the supportive role of government and value more the uncertainty-reduction and existential security function of government in times of a pandemic danger (Jost and Amodio 2012). By contrast, when companies do good, at high levels of benefits to employees, both liberals and conservatives respond with stronger positive word of mouth. Apparently, liberals and conservatives both acknowledge that strong stewardship of employees during the threat of a pandemic is both admirable and expected. This may happen for different reasons. Conservatives see strong benefits as enhancing profitability of the firm, which they value more than liberals. Liberals see strong benefits as reinforcing their valuing of social responsibility. But when benefit is perceived to be low, praise in the form of positive word of mouth is low, too, but relatively greater for conservatives versus liberals. Greater identification and valuing of corporate focus on profits versus social benefits leads to relatively more praise by conservatives, whereas liberals emphasise more social goals than conservatives, which are thwarted when perceived benefits are low.

Future research could investigate the role of other positive moral emotions beyond gratitude such as admiration, awe, and elevation. Although past research has found these to form distinct emotions at a concrete level of abstraction yet comprise a triad of reactions at a higher level of abstraction (Bagozzi et al. 2023), admiration, awe, elevation, and gratitude might function differently and separately under some circumstances and are in need of further research.

Benefits were conceived herein as overall or summary benefits. Future research might investigate different kinds of benefits and different conditions under which they might function. For example, distinct physical, economic, psychological, and social benefits might exist and be subject to unique cognitive templates and positive moral emotions, with different effects on dependent variables.

We investigated praise-related action tendencies as dependent variables, where we considered three distinct intentions: intentions to (1) say positive things about government/company to friends, relatives, and other people, (2) recommend one's friends, relatives, and other people consider working for the government/company, and (3) speak well of the government/company to friends, relatives, and other people. Other dependent variables are worthy of study, too. For instance, writing letters directly to benefactors thanking them for their actions, giving testimonials to news media, supporting political parties in power, and

patronising the products or services of admired companies might be interesting action tendencies to explore.

We examined political ideology by measuring it with specific questions regarding social and cultural issues and economic issues, as well as the frequently used bipolar liberalism–conservatism item. Future research might study the two defining qualities of political ideology mentioned by Jost et al. (2003a, 2003b): inequality and social change.

Other moderators should also be considered with regards to benefits. For example, Bagozzi et al. (2023) found that collective values moderated the tranquillity emotions-to-compliance link in a study of government doing good during the COVID-19 pandemic. Research on corporate social responsibility shows that social justice values (caring for the poor; correcting social injustice) moderate the effects of the ethics of autonomy on positive moral emotions and attitude (Xie et al. 2019). Other normative variables related to the cognitive morals template are worthy of study as well.

Moral harm and moral benefit have been investigated under conditions when an agent commits acts intentionally, the acts damage or benefit another actor, and an observer reacts vicariously with moral emotions and perceptions of harm or benefit. Social cognitive arguments might apply as well when a person, either on their own or as an agent of government or organisations, commits acts that have positive consequences for individuals, government, the environment, or companies. Here, instead of moral emotions, perpetrators of such beneficial actions should feel pride, and pride might mediate the link from the cognitive template to moral judgements and action tendencies (Tracy and Robins 2007).

An important issue raised by a reviewer is whether political ideology regulates responses of positive moral psychology to perceptions of government or companies doing good. We argued that the intensity of the stimulus manipulation might account for the need of moderators to bridge the gap between conditions underpinning the manipulation and felt moral emotions. In contrast to a recent study showing that political ideology moderated the manipulation to moral emotion link for a moderately strong but declining situation of COVID-19 (Bagozzi et al. 2023), our study with a stronger stimulus of a new impending pandemic showed that political ideology did not moderate the manipulation to gratitude relationship, and the effect occurred without the need of a moderator. But if this is true, why did Bagozzi et al. (2025) recently find that moral identity moderated the effect of the manipulation on gratitude in three countries (Italy, Norway, and the U.S.) for corporations doing good? It is possible that moral identity is a general personality trait that functions in most if not all contexts and is not differentially sensitive to the strength of the stimulus. This speculative interpretation needs further research.

There is another explanation for the differential role of political ideology in the control of the effects of the manipulation of good and bad behaviour on moral emotions. In the context of climate change, it has been shown that liberals are more favourable than conservatives towards environmental initiatives (Cheung et al. 2019). Protection of the environment requires a certain amount of government regulation and added costs occur to the running of businesses, which conservatives tend to

resist and liberals support (Liu et al. 2014). Bagozzi, Soscia, and Babutsidze (2024) found that cultural differences underlay the effects of liberals and conservatives on advocating environmentalism. In the United States, corporate misconduct concerning the environment led to a higher level of contempt, anger, and disgust for liberals versus conservatives, but in France, no differences were found between liberals and conservatives. This finding was explained by the presence of strong cultural differences where partisan differences between liberals and conservatives in the United States account for the significant moderation effects, whereas in France, although the left and right once differed in their support of climate change initiatives (Aykut et al. 2012), the right and left now equally support such initiatives (Kulin et al. 2021). Thus, the role of political ideology can differ across countries due to historical development and social change reflective of cultural differences (Rachlinski 2021).

A potential shortcoming of our research concerns the basis for causal inference. Because gratitude (H1) and benefit (H2) are directly influenced by the experimental manipulation, these outcomes have relatively sound support for causal inference. But the effects of gratitude on benefit (H3) and benefit on action tendencies (H4) are only indirectly affected by the experimental manipulations and therefore cannot be considered to rest on strong causal inferences but are more correlational. By directly manipulating gratitude and benefit, stronger conclusions can be made for causal inference and should be done in the future.

7 | Conclusion

We showed that the theory of dyadic morality, which has been developed and tested to date for harm, can provide theoretical grounding for the role that benefit plays in morality. We found that a benefit template, manifest in the manipulation of responsible actions performed by government and companies, directly activates felt gratitude, experienced vicariously by observers of the responsible actions, and directly induces felt benefit. Gratitude, in turn, mediates the effect of the benefit template on felt benefit. Likewise, felt benefit mediates the effect of gratitude on action tendencies, but does so differently for government and companies as a consequence of the different valuing of social action and corporate action by conservatives and liberals.

In the face of the ever-present threat of a pandemic (Heymann et al. 2024), our findings highlight the importance of governments and companies acting responsibly to foster public engagement and trust. Institutions and organisations can enhance public cooperation, promote positive word of mouth, and strengthen their preparedness and response efforts by emphasising behaviours that elicit gratitude and tailoring messages to align with different political ideologies.

Funding

This work was supported by Research Council of Norway, Grant/Award Number: 312683.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are openly available in OSF Data Depository at https://osf.io/zwfm9/?view_only=9c9418375b3d424687bce12d97837c0d.

References

- Ajzen, I. 2005. *Attitudes, Personality, and Behavior*. 2nd ed. Open University Press.
- Alves, P. C., and J. B. Porto. 2022. "Measuring Political Ideology: Validity Evidence for a Two-Factor Model." *Trends in Psychology* 30: 129–145. <https://doi.org/10.1007/s43076-021-00093-z>.
- American Psychological Association. 2018. "Evaluation." In *American Psychological Association Dictionary of Psychology*, Online ed. American Psychological Association.
- Anderson, J. E., and D. Dunning. 2014. "Behavioral Norms: Variants and Their Identification." *Social and Personality Psychology Compass* 8, no. 12: 721–738. <https://doi.org/10.1111/spc3.12146>.
- Aykut, S., J.-B. Comby, and H. Guillemot. 2012. "Climate Change Controversies in French Mass Media 1990–2010." *Journalism Studies* 13, no. 2: 157–174. <https://doi.org/10.1080/1461670X.2011.646395>.
- Bagozzi, R. P., S. Mari, O. Oklevik, and C. Xie. 2023. "Responses of the Public Towards the Government in Times of Crisis." *British Journal of Social Psychology* 62, no. 1: 359–392. <https://doi.org/10.1111/bjso.12566>.
- Bagozzi, R. P., I. Soscia, and Z. Babutsidze. 2024. "Yes, We Care! Consumer Emotional Responses to Corporate Neglect of Climate Change and the Role of Individual Differences." *Journal of Consumer Affairs* 58, no. 4: 1161–1192. <https://doi.org/10.1111/joca.12606>.
- Bagozzi, R. P., C. Xie, S. Mari, and O. Oklevik. 2024. "The Theory of Dyadic Morality and Moral Identity Explain the Public's Response to Harm Done by Government and Organizations." *Journal of Community & Applied Social Psychology* 34, no. 6: 1–17. <https://doi.org/10.1002/casp.70004>.
- Bagozzi, R. P., C. Xie, S. Mari, and O. Oklevik. 2025. "How and When Positive Actions by Agents Influence Action Tendencies in Observers: Benefits Mediate the Gratitude to Morality Link Under Dyadic Morality." *Journal of Community & Applied Social Psychology* 35, no. 5: e70161. <https://doi.org/10.1002/casp.70161>.
- Bandura, A. 1977. *Social Learning Theory*. Prentice-Hall. <https://doi.org/10.1177/105960117700200317>.
- Cheung, L. T., A. T. Ma, K. M. Lee, J. C. Lee, and Y. L. Lo. 2019. "How Does Political Orientation Influence One's Environmental Attitude and Behaviour? Debate Over Country Park Conservation in Hong Kong." *Environmental Science & Policy* 99: 115–122. <https://doi.org/10.1016/j.envsci.2019.05.026>.
- Cialdini, R. B., C. A. Kallgren, and R. R. Reno. 1991. "A Focus Theory of Normative Conduct: A Theoretical Refinement and Reevaluation of the Role of Norms in Human Behavior." In *Advances in Experimental Social Psychology*, vol. 24, 201–234. Academic Press.
- Deane, C., K. Parker, and J. Gramlich. 2021. *A Year of U.S. Public Opinion on the Coronavirus Pandemic*. Pew Research Center. <https://www.pewresearch.org/social-trends/2021/03/05/a-year-of-u-s-public-opinion-on-the-coronavirus-pandemic/>.
- Eagly, A. H. 2007. "The Advantages of an Inclusive Definition of Attitude." *Social Cognition* 25, no. 5: 582–602. <https://doi.org/10.1521/soco.2007.25.5.582>.
- Eagly, A. H., and S. Chaiken. 1993. *The Psychology of Attitudes*. Harcourt Brace Jovanovich college publishers.
- Freedman, M. 2001. "Ideology: Political Aspects." In *International Encyclopedia of the Social & Behavioral Sciences*, edited by N. J. Smelser and P. B. Baltes. Pergamon. <https://doi.org/10.1016/B0-08-043076-7/01154-2>.
- Frijda, N. H., P. Kuipers, and E. Ter Schure. 1989. "Relations Among Emotion, Appraisal, and Emotional Action Readiness." *Journal of Personality and Social Psychology* 57, no. 2: 212. <https://doi.org/10.1037/0022-3514.57.2.212>.
- Gert, B., and J. Gert. 2020. "The Definition of Morality." In *The Stanford Encyclopedia of Philosophy (Fall 2020 Edition)*, edited by E. N. Zalta. Metaphysics Research Lab, Stanford University. <https://plato.stanford.edu/archives/fall2020/entries/morality-definition/>.
- Gewirth, A. 1984. *The Epistemology of Human Rights*. University of Chicago Press. <https://doi.org/10.1017/S0265052500003836>.
- Grappi, S., S. Romani, and R. P. Bagozzi. 2013a. "Consumer Response to Corporate Irresponsible Behavior: Moral Emotions and Virtues." *Journal of Business Research* 66, no. 10: 1814–1821. <https://doi.org/10.1016/j.jbusres.2013.02.002>.
- Grappi, S., S. Romani, and R. P. Bagozzi. 2013b. "The Effects of Company Offshoring Strategies on Consumer Responses." *Journal of the Academy of Marketing Science* 41, no. 6: 683–704. <https://doi.org/10.1007/s11747-013-0340-y>.
- Grappi, S., S. Romani, and R. P. Bagozzi. 2020. "Consumer Reshoring Sentiment and Animosity: Expanding Our Understanding of Market Responses to Reshoring." *Management International Review* 60, no. 1: 69–95. <https://doi.org/10.1007/s11575-019-00399-2>.
- Gray, K., L. Young, and A. Waytz. 2012. "Mind Perception Is the Essence of Morality." *Psychological Inquiry* 23, no. 2: 101–124. <https://doi.org/10.1080/1047840X.2012.651387>.
- Haidt, J. 2001. "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment." *Psychological Review* 108, no. 4: 814–834. <https://doi.org/10.1037/0033-295X.108.4.814>.
- Haidt, J. 2002. "'Dialogue Between My Head and My Heart': Affective Influences on Moral Judgment." *Psychological Inquiry* 13, no. 1: 54–56.
- Haidt, J. 2003. "The Moral Emotions." In *Handbook of Affective Sciences*, edited by R. J. Davidson, K. R. Scherer, and H. H. Goldsmith, 852–870. Oxford University Press.
- Haidt, J. 2012. *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. Vintage.
- Haidt, J., S. H. Koller, and M. G. Dias. 1993. "Affect, Culture, and Morality, or Is It Wrong to Eat Your Dog?" *Journal of Personality and Social Psychology* 65, no. 4: 613–628.
- Harrison, J. 1967. "Ethical Objectivism." In *The Encyclopedia of Philosophy*, edited by P. Edwards, vol. 3–4, 71–75. Macmillan.
- Hayes, A. F. 2022. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. 3rd ed. Guilford Press.
- Heymann, D., E. Ross, and J. Wallace. 2024, June 28. "The Next Pandemic – When Could It Be?" Chatham House. <https://www.chathamhouse.org/article/the-next-pandemic-when-could-it-be>.
- Hitlin, P., and N. Shutava. 2022. *Trust in Government*. Partnership for Public Service and Freedman Consulting.
- Janoff-Bulman, R., S. Sheikh, and S. Hepp. 2009. "Proscriptive Versus Prescriptive Morality: Two Faces of Moral Regulation." *Journal of Personality and Social Psychology* 96, no. 3: 521–537. <https://doi.org/10.1037/a0013779>.
- Jeong, N., and N. Kim. 2020. "The Effects of Political Orientation on Corporate Social (Ir) Responsibility." *Management Decision* 58, no. 2: 255–266. <https://doi.org/10.1108/MD-06-2019-0713>.
- Jiang, F., T. Zalan, H. H. Tse, and J. Shen. 2018. "Mapping the Relationship Among Political Ideology, CSR Mindset, and CSR Strategy: A Contingency Perspective Applied to Chinese Managers."

- Journal of Business Ethics* 147: 419–444. <https://doi.org/10.1007/s10551-015-2992-7>.
- Jost, J. T., and D. M. Amodio. 2012. “Political Ideology as Motivated Social Cognition: Behavioral and Neuroscientific Evidence.” *Motivation and Emotion* 36: 55–64. <https://doi.org/10.1007/s11031-011-9260-7>.
- Jost, J. T., C. M. Federico, and J. L. Napier. 2009. “Political Ideology: Its Structure, Functions, and Elective Affinities.” *Annual Review of Psychology* 60, no. 1: 307–337. <https://doi.org/10.1146/annurev.psych.60.110707.163600>.
- Jost, J. T., J. Glaser, A. W. Kruglanski, and F. Sulloway. 2003a. “Political Conservatism as Motivated Social Cognition.” *Psychological Bulletin* 129: 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>.
- Jost, J. T., J. Glaser, A. W. Kruglanski, and F. Sulloway. 2003b. “Exceptions That Prove the Rule: Using a Theory of Motivated Social Cognition to Account for Ideological Incongruities and Political Anomalies: Reply to Greenberg and Jonas (2003).” *Psychological Bulletin* 129: 383–393. <https://doi.org/10.1037/0033-2909.129.3.383>.
- Kennedy, B., and J. Courtney. 2020. More Americans See Climate Change as a Priority, but Democrats Are Much More Concerned Than Republicans. <https://www.pewresearch.org/short-reads/2020/02/28/more-americans-see-climate-change-as-a-priority-but-democrats-are-much-more-concerned-than-republicans/>.
- Ketron, S., S. Kwaramba, and M. Williams. 2022. “The ‘Company Politics’ of Social Stances: How Conservative vs. Liberal Consumers Respond to Corporate Political Stance-Taking.” *Journal of Business Research* 146: 354–362. <https://doi.org/10.1016/j.jbusres.2022.03.086>.
- Kulin, J., I. Johansson Sevä, and R. E. Dunlap. 2021. “Nationalist Ideology, Rightwing Populism, and Public Views About Climate Change in Europe.” *Environmental Politics* 30, no. 7: 1111–1134. <https://doi.org/10.1080/09644016.2021.1898879>.
- Lazarus, R. S. 1991. “Progress on a Cognitive-Motivational-Relational Theory of Emotion.” *American Psychologist* 46, no. 8: 819–834. <https://doi.org/10.1037/0003-066X.46.8.819>.
- Lim, J., and K. K. Moon. 2023. “Political Ideology and Trust in Government to Ensure Vaccine Safety: Using a US Survey to Explore the Role of Political Trust.” *International Journal of Environmental Research and Public Health* 20, no. 5: 4459. <https://doi.org/10.3390/ijerph20054459>.
- Liu, X., A. Vedlitz, and L. Shi. 2014. “Examining the Determinants of Public Environmental Concern: Evidence From National Public Surveys.” *Environmental Science & Policy* 39: 77–94. <https://doi.org/10.1016/j.envsci.2014.02.006>.
- McCarthy, J. 2020. *Roundup of Gallup COVID-19 Coverage*. Gallup News. <https://news.gallup.com/opinion/gallup/308126/roundup-gallup-covid-coverage.aspx>.
- McCullough, M. E., S. D. Kilpatrick, R. A. Emmons, and D. B. Larson. 2001. “Is Gratitude a Moral Affect?” *Psychological Bulletin* 127, no. 2: 249–266. <https://doi.org/10.1037/0033-2909.127.2.249>.
- McCullough, M. E., M. B. Kimeldorf, and A. D. Cohen. 2008. “An Adaptation for Altruism: The Social Causes, Social Effects, and Social Evolution of Gratitude.” *Current Directions in Psychological Science* 17, no. 4: 281–285. <https://doi.org/10.1111/j.1467-8721.2008.00590.x>.
- McLamore, Q., S. Syropoulos, B. Leidner, et al. 2022. “Trust in Scientific Information Mediates Associations Between Conservatism and Coronavirus Responses in the U.S., but Few Other Nations.” *Scientific Reports* 12, no. 1: 3724. <https://doi.org/10.1038/s41598-022-07508-6>.
- Merriam-Webster. 2024. “Immortality.” In Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/immortality>.
- Miller, R., and F. Cushman. 2019. “Moral Values and Motivations: How Special Are They.” In *The Atlas of Moral Psychology: Mapping Good and Evil*, edited by K. Gray and J. Graham, 59–69. Guilford Press.
- Nanay, B. 2020. “Vicarious Representation: A New Theory of Social Cognition.” *Cognition* 205: 104451. <https://doi.org/10.1016/j.cognition.2020.104451>.
- Pomerance, J., and E. Zifla. 2025. “Beyond the Bottom Line: The Influence of Political Ideology on Preference for Corporate Sociopolitical Activism.” *Journal of Business Research* 200: 115569. <https://doi.org/10.1016/j.jbusres.2025.115569>.
- Rachlinski, J. J. 2021. “What Is Cultural Cognition, and Why Does It Matter?” *Annual Review of Law and Social Science* 17, no. 1: 277–291. <https://doi.org/10.1146/annurev-lawsocsci-011921-060754>.
- Reno, R. R., R. B. Cialdini, and C. A. Kallgren. 1993. “The Transsituational Influence of Social Norms.” *Journal of Personality and Social Psychology* 64, no. 1: 104–112.
- Rozin, P., L. Lowery, S. Imada, and J. Haidt. 1999. “The CAD Triad Hypothesis: A Mapping Between Three Moral Emotions (Contempt, Anger, Disgust) and Three Moral Codes (Community, Autonomy, Divinity).” *Journal of Personality and Social Psychology* 76, no. 4: 574–586. <https://doi.org/10.1037/0022-3514.76.4.574>.
- Rudolph, T. J., and J. Evans. 2005. “Political Trust, Ideology, and Public Support for Government Spending.” *American Journal of Political Science* 49, no. 3: 660–671. <https://doi.org/10.1111/j.1540-5907.2005.00148.x>.
- Schein, C., and K. Gray. 2015. “The Unifying Moral Dyad: Liberals and Conservatives Share the Same Harm-Based Moral Template.” *Personality and Social Psychology Bulletin* 41, no. 8: 1147–1163.
- Schein, C., and K. Gray. 2018. “The Theory of Dyadic Morality: Reinventing Moral Judgment by Redefining Harm.” *Personality and Social Psychology Review* 22, no. 1: 32–70. <https://doi.org/10.1177/1088868317698288>.
- Schein, C., R. S. Ritter, and K. Gray. 2016. “Harm Mediates the Disgust-Immortality Link.” *Emotion* 16, no. 6: 862–876. <https://doi.org/10.1037/emo0000167>.
- Stets, J. E., and J. H. Turner. 2008. “The Sociology of Emotions.” In *Handbook of Emotions*, edited by M. Lewis, J. M. Haviland-Jones, and L. F. Barrett, 3rd ed., 32–46. Guilford Press.
- Stets, J. E., and J. H. Turner, eds. 2014. *Handbook of the Sociology of Emotions*. Vol. II. Springer.
- Tetlock, P. E. 2000. “Cognitive Biases and Organizational Correctives: Do Both Disease and Cure Depend on the Politics of the Beholder?” *Administrative Science Quarterly* 45, no. 2: 293–326. <https://doi.org/10.2307/2667073>.
- Tracy, J. L., and R. W. Robins. 2007. “The Psychological Structure of Pride: A Tale of Two Facets.” *Journal of Personality and Social Psychology* 92, no. 3: 506–525. <https://doi.org/10.1037/0022-3514.92.3.506>.
- Xie, C., R. P. Bagozzi, and K. Grønhaug. 2015. “The Role of Moral Emotions and Individual Differences in Consumer Responses to Corporate Green and Non-Green Actions.” *Journal of the Academy of Marketing Science* 43, no. 3: 333–356. <https://doi.org/10.1007/s11747-014-0394-5>.
- Xie, C., R. P. Bagozzi, and K. Grønhaug. 2019. “The Impact of Corporate Social Responsibility on Consumer Brand Advocacy: The Role of Moral Emotions, Attitudes, and Individual Differences.” *Journal of Business Research* 95: 514–530. <https://doi.org/10.1016/j.jbusres.2018.07.043>.

Appendix A

Experimental Scenarios

Study 1

Introduction to the Government Scenario

We would like you to think as vividly as possible about a developing pandemic threat. A new, unknown virus that is similar to COVID-19 and SARS, but whose characteristics and evolution are not fully known, is spreading fast around the world and has the possibility of developing into a global pandemic. The virus causes life-threatening respiratory problems and danger to vital organs and leads to a high mortality rate. The elderly and people with ongoing health challenges are especially vulnerable, but everyone is in danger of the health threat. Please try to imagine and put yourself in this future situation as vividly and validly

as possible. And then read the following message from various government institutions in our country 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 put yourself in the place of someone facing a future pandemic in our country and how you would react to this developing pandemic.

The Government Is Doing Positive Things to Confront the Danger

As information was becoming available about the new unknown virus contagion in some regions outside the United States and the occurrence of initial infections in our country, our institutions initiated a coordinated effort to prepare for, mitigate and recover from any negative consequences of this new virus. Initial evidence is that this virus is both

TABLE A1 | Summary of findings for Process Model 84: Government doing good and political ideology as a moderator and gratitude and benefit as mediators of the effects of manipulated government actions on gratitude and benefit.

Independent variables	Gratitude (M ₁)			Benefit (M ₂)			Positive word of mouth (Y)		
	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI
Constant	3.25 (0.09)	35.68 (0.00)	3.07, 3.43	2.02 (0.17)	11.92 (0.00)	1.68, 2.35	0.21 (0.27)	0.80 (0.42)	-0.31, 0.74
Manipulation (X)	0.23 (0.09)	2.52 (0.01)	0.05, 0.41	-0.02 (0.06)	-0.28 (0.78)	-0.13, 0.10	-0.00 (0.07)	-0.05 (0.96)	-0.15, 0.14
Political ideology (W)	0.29 (0.09)	3.13 (0.00)	0.11, 0.47	0.13 (0.06)	2.08 (0.04)	0.01, 0.24	—	—	—
X*W	0.07 (0.09)	0.79 (0.43)	-0.11, 0.25	0.08 (0.06)	1.42 (0.16)	-0.03, 0.20	—	—	—
Gratitude (M ₁)				0.44 (0.05)	9.09 (0.00)	0.35, 0.54	0.14 (0.07)	1.90 (0.06)	-0.01, 0.28
Benefit (M ₂)							0.64 (0.09)	7.06 (0.00)	0.46, 0.83
	$R^2=0.08$ F(3, 173)=4.96, $p<0.01$			$R^2=0.38$ F(4, 172)=26.24, $p<0.001$			$R^2=0.39$ F(3, 173)=36.13, $p<0.001$		

TABLE A2 | Summary of findings for Process Model 84: Company doing good and political ideology as a moderator and gratitude and benefit as mediators of the effects of manipulated company actions on gratitude and benefit.

Independent variables	Gratitude (M ₁)			Benefit (M ₂)			Positive word of mouth (Y)		
	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI	b (SE)	t (p)	95% CI
Constant	3.09 (0.10)	31.56 (0.00)	2.90, 3.29	2.55 (0.15)	16.50 (0.00)	2.24, 2.85	0.21 (0.26)	0.79 (0.43)	-0.31, 0.72
Manipulation (X)	0.42 (0.10)	4.25 (0.00)	0.22, 0.61	0.17 (0.06)	2.93 (0.00)	0.06, 0.29	0.12 (0.06)	2.00 (0.05)	0.00, 0.25
Political ideology (W)	0.16 (0.10)	1.63 (0.11)	-0.03, 0.36	0.01 (0.06)	0.23 (0.82)	-0.10, 0.13	—	—	—
X*W	0.10 (0.10)	0.99 (0.32)	-0.10, 0.29	-0.02 (0.06)	-0.43 (0.67)	-0.14, 0.09	—	—	—
Gratitude (M ₁)				0.35 (0.05)	7.54 (0.00)	0.26, 0.44	0.10 (0.05)	1.77 (0.08)	-0.01, 0.21
Benefit (M ₂)							0.80 (0.08)	9.73 (0.00)	0.64, 0.97
	$R^2=0.12$ F(3, 152)=7.17, $p<0.001$			$R^2=0.37$ F(4, 151)=22.59, $p<0.001$			$R^2=0.59$ F(3, 152)=71.48, $p<0.001$		

measurably more severe in its symptoms than seasonal influenza and spreads much more readily. Indeed, the unknown virus is a clear and present danger to all of us. As a consequence, the government will take the following steps. When an outbreak is detected, all places of business and employment will be temporarily closed, except for hospitals, grocery stores, and other critical services. All schools will be suspended temporarily and no public gathering points such as concerts, movies, recreational facilities, or sport venues will be permitted to remain open over the foreseeable future. Indeed, people are to remain in their homes except to purchase food or to exercise and are expected to wear face masks and maintain physical separation of two yards or more from other people at all times. Our government institutions are actively preparing and implementing the procedure needed to test, trace and isolate confirmed cases. Bed capacities in hospitals are being increased, medical and homecare hygienic cleaning equipment, disinfectants, and so forth 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 new virus is a critical concern for worry, and people are asked to cooperate and sacrifice for the common good. As the government spokesperson said in newspaper interviews, 'The new virus danger for Americans is a great concern, and we will redouble our efforts to be as prepared as possible, in the likelihood of epidemics. Remain vigilant and cautious. But be assured that we are preparing our institutions and caregivers to prevent this virus from becoming a significant health hazard.'

Introduction to the Government Neutral Condition

We would like you to think as vividly as possible about a developing pandemic threat. A new, unknown virus that is similar to COVID-19 and SARS, but whose characteristics and evolution are not fully known, may be spreading fast around the world and has the possibility to develop into a global pandemic. The virus could cause respiratory problems. The elderly and people with ongoing health challenges may be vulnerable, but of course, the virus could spread to a larger population. Please try to imagine and put yourself in this future situation as vividly and validly as possible. And then read the following message from various government institutions in our country, 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 put yourself in place of someone facing a future pandemic in our country and how you can react to this developing pandemic.

Neutral Condition for Government

To prepare the health system to possible incursion of the virus, the government will send advisories throughout federal agencies, local authorities and health care facilities to inform these institutions of these developments. Feedback is welcome from the public. The United States has an extensive network of government agencies, which include capabilities and professional bureaucrats who monitor health matters. Equipment and supplies for responding to health problems are available. Many hospitals and many beds exist. Health systems exist throughout the country, and most communities are staffed with personnel working for the public good and ready to answer any questions the public might raise. Medical caregivers have education that is updated periodically. Information is available on a wide range of health matters. Communication with the public is available through various media. Health information is available to the public. The United States participates in worldwide forums on health matters and is a regular contributor to these. Health care is a public priority. The United States continues to maintain a public health system that is responsible and up to date. Medical care is comprehensive and efficient.

Study 2

Introduction to Company Manipulation

We would like you to think as vividly as possible about a developing pandemic threat. A new, unknown virus that is similar to COVID-19 and SARS, but whose characteristics and evolution are not fully known, is spreading fast around the world and has the possibility of developing into a global pandemic. The virus causes life-threatening respiratory problems and danger to vital organs and leads to a high mortality rate. The elderly and people with ongoing health challenges are especially vulnerable, but everyone is in danger of the health threat. Now we are going to provide a description of Triangle Corporation and its actions in this new situation. Take a moment to imagine, as you read it as vividly as possible, this company in your mind. Then answer the questions that follow as best you can. Please remember that we wish you to respond to the questions as they apply to the company itself as you interpret it, and not necessarily your belief in how the company could have acted differently from the description you read. We want your frank responses to the company and its actions.

The Company Is Acting Responsibly

Triangle Corporation, a large American manufacturer of agricultural products and known as a low-cost producer, did much to mitigate the spread of the new virus and protect its workers. The company provided all supplies needed to protect employees such as masks and disinfectants, and required that everyone use them diligently. Government and industry guidelines for maintaining at least 2 yards (1 m) separation between employees were strictly enforced. Management advised employees to stay at home at the slightest onset of feeling ill. To reduce exposure to the virus, work load was shortened to 6 h per day for a new work week of 4 days in the foreseeable future. Triangle Corporation made extraordinary efforts to wash all surfaces that workers might touch each day before work began, and again at the work breaks in the middle of the workday. The leadership believed that the danger of infection from the new virus was a real concern, and it was the responsibility of the company and management to protect workers as a matter of top corporate policy. As a consequence, the company engaged in dedicated planning and training so as to implement a work environment that would be as safe and hygienic as possible. Worker welfare is a very important goal for the company indeed.

Introduction to the Company Neutral Condition

We would like you to think as vividly as possible about a developing pandemic threat. A new, unknown virus that is similar to COVID-19 and SARS, but whose characteristics and evolution are not fully known, may be spreading fast around the world and has the possibility of developing into a global pandemic. The virus could cause respiratory problems. The elderly and people with ongoing health challenges may be vulnerable, but of course, the virus could spread to a larger population. Now we are going to provide a description of Triangle Corporation and its actions in this new situation. Take a moment to imagine as you read it as vividly as possible this company in your mind. Then answer the questions that follow as best you can. Please remember that we wish you to respond to the questions as they apply to the company itself, as you interpret it, and not necessarily your belief in how the company could have acted differently from the description you read. We want your frank responses to the company and its actions.

Neutral Condition for the Company

Triangle Corporation, a large American manufacturer of agricultural products, is known as a low-cost producer. The company has been in business for 44 years and is regarded as a nondescript manufacturer of average reputation in the business world and the local community. Business has been stable over the course of its existence. The company has a varied product line and makes various consumer-related products.

It also manufactures supplies products for animal consumption. The company is considering increasing its overseas business. Its attention to new technologies is adequate. Sales have not varied much over the past few years. The value of the company has been steady over the past decade. The company is basically valued by employees as simply an adequate place to work and make a satisfactory living. Top management meets normal requirements for maintaining the welfare of the workforce. The company is currently reviewing its practices with respect to how to respond to viruses.